Environment Canada Environnement Canada

Surface Water Data

# Manitoba

Données sur les eaux de surface

## 1989

**INLAND WATERS DIRECTORATE**
**WATER RESOURCES BRANCH**
**WATER SURVEY OF CANADA**
**OTTAWA, CANADA, 1990**

**DIRECTION GÉNÉRALE DES EAUX INTÉRIEURES**
**DIRECTION DES RESSOURCES EN EAU**
**DIVISION DES RELEVÉS HYDROLOGIQUES DU CANADA**
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## PREFACE

This publication was prepared by personnel of the Water Survey of Canada Division under the direction of the Director, Water Resources Branch, Department of the Environment, Ottawa.

The basic data were collected and compiled under the supervision of the Regional Chief of the Water Resources Branch at Winnipeg, Manitoba.

The co-operation received from provincial agencies and from other organizations is gratefully acknowledged.

## PRÉFACE

La Division des relevés hydrologiques du Canada, sous l'autorité du Directeur des ressources en eau du ministère de l'Environnement (Ottawa), a préparé la présente publication.

On a recueilli et compilé les données de base sous la supervision du Chef régional de la Direction des ressources en eau, à Winnipeg (Manitoba).

On remercie vivement les organismes provinciaux, ou autres, pour la coopération qu'ils ont apportée.

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## INTRODUCTION

The Water Resources Branch of the Department of the Environment herein presents for the 1989 calendar year, the results of the hydrometric survey investigations which were made in Manitoba by the Water Survey of Canada.

Details on individual stations and related records, as well as recent data which have not yet been published, may be obtained upon application to:

Water Resources Branch,
Department of the Environment,
521 Federal Building,
269 Main Street,
Winnipeg, Manitoba.
R3C 1B2
(204 983-2435)

or to the Water Resources Branch, Department of the Environment, Ottawa, Ontario, K1A 0H3 (819 997-2098).

## INTRODUCTION

La Direction des ressources en eau du ministère de l'Environnement présente, pour l'année civile 1989, les résultats des relevés hydrométriques que la Division des relevés hydrologiques du Canada a effectués au Manitoba.

En s'adressant aux endroits ci-après, on peut obtenir des renseignements supplémentaires sur certaines stations particulières et divers relevés, ainsi que des données récentes non encore publiées:

Direction des ressources en eau
Ministère de l'Environnement
521 Édifice fédéral
269, rue Main
Winnipeg (Manitoba)
R3C 1B2
(204 983-2435)

ou au Direction des ressources en eau, ministère de l'Environnement, Ottawa (Ontario), K1A 0H3 (819 997-2098).

## ORGANIZATION AND HISTORY OF HYDROMETRIC SURVEY OPERATIONS

During 1989, the hydrometric surveys in Manitoba were conducted by the Water Survey of Canada under agreement with the Province of Manitoba. The provincial authorities contributed to the cost of the basic field investigations which were carried out in accordance with mutually agreed-upon plans.

## ORGANISATION ET HISTORIQUE DES RELEVÉS HYDROMÉTRIQUES

En 1989, la Division des relevés hydrologiques du Canada a effectué des relevés hydrométriques au Manitoba en vertu de l'accord conclu avec les autorités provinciales, qui ont contribué au coût des recherches de base réalisées sur le terrain, après entente mutuelle sur leur programme.

Stream-gauging work started in Manitoba when the Winnipeg River Power Survey was commenced in 1911 by the Dominion Water Power Branch. The Manitoba Hydrographic Survey was organized in early 1912 and the survey was expanded to embrace all Manitoba and the Lake of the Woods in Ontario. Following the transfer of the natural resources of Manitoba to provincial control as of October 1, 1930, a co-operative agreement was arranged with the Government of Manitoba for the continuance of the hydrometric survey by the federal government. Although this agreement was terminated in 1933, work was continued by the federal government under letter arrangement until 1975. A co-operative agreement was signed with the Government of Manitoba on February 18, 1975, and implemented on April 1, 1975. The agreement provides that water quantity surveys will be continued by the federal government on a shared cost basis.

## CO–OPERATION AND ACKNOWLEDGMENTS

Co-operative undertakings with other agencies form an important part of the activities of the Water Survey of Canada. Close co-operation has been maintained with public agencies and private organizations concerned with water resources. Runoff and other data have been mutually exchanged and stream-gauging operations have been facilitated by the assistance received from a number of organizations.

On waters adjacent to the International Boundary, certain gauging stations are maintained by Canada (or the United States) under agreement with the United States (or Canada) and the records are collected and compiled in a manner equally acceptable to both countries. These stations are designated as "International Gauging Stations" in this publication.

For the valuable assistance and co-operation received in obtaining hydrometric survey records, the Water Survey of Canada is indebted to the following organizations:

Federal – Department of Public Works;
Agriculture Canada, PFRA.

Provincial – Manitoba Hydro, Manitoba;
Department of Natural Resources, Water Resources Branch, Manitoba.

Municipal – City of Winnipeg Hydro-Electric System, Manitoba.

C'est en 1911, lorsque la Direction fédérale de l'énergie hydraulique a fondé le *Winnipeg River Power Survey*, que cet organisme a effectué les premières observations relatives aux cours d'eau au Manitoba. Avec la création du *Manitoba Hydrographic Survey* au début de 1912, le champ des relevés s'est élargi pour englober tout le Manitoba et le lac des Bois en Ontario. Après que la responsabilité des ressources naturelles du Manitoba est passée au gouvernement provincial, le 1er octobre 1930, le Manitoba et le gouvernement fédéral ont conclu un accord qui permettait à ce dernier de poursuivre les relevés hydrométriques. L'accord a pris fin en 1933, mais en vertu d'une lettre d'entente, le gouvernement fédéral a continué d'exécuter les observations hydrométriques jusqu'en 1975. Le 18 février 1975, le gouvernement du Manitoba a signé un nouvel accord, qui est entré en vigueur le 1er avril 1975, renfermant des dispositions grâce auxquelles le gouvernement fédéral s'occupera du programme de relevés hydrométriques et partagera le coût des mesures avec la province.

## COOPÉRATION ET REMERCIEMENTS

Le travail entrepris en coopération avec d'autres organismes représente une partie importante des activités de la Division des relevés hydrologiques du Canada. On a maintenu une étroite collaboration avec les organismes, publics ou privés, qui s'intéressent aux ressources en eau. On a échangé des données portant sur l'écoulement ou sur d'autres points, et l'assistance fournie par beaucoup d'organismes a facilité les opérations de jaugeage.

Pour ce qui est des eaux adjacentes à la frontière internationale, certaines stations de jaugeage dépendent du Canada (ou des États-Unis) suite à un accord avec les États-Unis (ou le Canada), et les relevés sont faits et compilés de façon à satisfaire les deux pays. Ces stations sont nommées «Stations internationales de jaugeage».

La Division des relevés hydrologiques du Canada est redevable aux organismes suivants de l'aide et de la collaboration précieuses qu'ils lui ont apportées lors de la prise des relevés hydrométriques:

Niveau fédéral – Ministère des Travaux publics,
Agriculture Canada (ARAP).

Niveau provincial – Hydro-Manitoba,
Ministère des Ressources naturelles, Direction des ressources en eau, Manitoba.

Niveau municipal – *Hydro-Electric System* de Winnipeg,
Manitoba.

## EQUIVALENTS OF MEASURE

The following list of convenient equivalents of measure includes the relationship between imperial units and the International System of Units (SI).

1 inch equals 2.54 cm (centimetres)
1 foot equals 0.3048 m (metre)
1 statute mile equals 1.6093 km (kilometres)

1 cm (centimetre) equals 0.393 70 inch
1 m (metre) equals 3.2808 feet
1 km (kilometre) equals 0.621 37 mile

1 acre equals 43 560 square feet
1 acre equals 0.404 69 ha (hectare)
1 square mile equals 640 acres
1 square mile equals 2.5900 $km^2$ (square kilometres)
1 square mile equals 259.0 ha (hectares)

1 ha (hectare) equals 10 000 $m^2$ (square metres)
1 ha (hectare) equals 2.4710 acres
1 $km^2$ (square kilometre) equals 0.386 10 square mile

1 cubic foot equals 6.2288 imperial gallons
1 imperial gallon equals 4.546 09 L (litres)
1 imperial gallon equals 1.2010 U.S. gallons
1 U.S. gallon equals 0.133 68 cubic foot
1 cubic foot equals 0.028 317 $m^3$ (cubic metre)
1 $m^3$ (cubic metre) equals 35.315 cubic feet
1 $dam^3$ (cubic decametre) equals 1000 $m^3$ (cubic metres)
1 $dam^3$ (cubic decametre) equals 1 mm (millimetre) over 1 $km^2$ (square kilometre)

1 cubic foot per second for one day equals 1.9835 acre-feet
1 cubic foot per second for one day covers one square mile to a depth of 0.037 19 inch
1 acre-foot equals 1.2335 $dam^3$ (cubic decametres)
1 $m^3/s$ (cubic metre per second) for one day equals 86.4 $dam^3$ (cubic decametre)
1 $m^3/s$ (cubic metre per second) for one day covers one square kilometre to a depth of 0.0864 m (metre)

1 foot per second equals 0.6818 mile per hour
1 mile per hour equals 1.467 feet per second
1 m/s (metre per second) equals 3.6 km/h (kilometre per hour)
1 km/h (kilometre per hour) equals 0.2778 m/s (metre per second)

1 cubic foot per second equals 0.028 317 $m^3/s$ (cubic metre per second)
1 $m^3/s$ (cubic metre per second) equals 35.315 cubic feet per second

1 pound equals 0.453 59 kg (kilogram)
1 kg (kilogram) equals 2.2046 pounds

1 short ton (2000 pounds) equals 0.907 18 t (tonne)
1 t (tonne) equals 2204.6 pounds

degrees Celsius = 5/9 (degrees Fahrenheit - 32)
degrees Fahrenheit = 9/5 (degrees Celsius) + 32

## ÉQUIVALENCES DES UNITÉS DE MESURE

Voici une liste des unités de mesure impériales et leurs équivalences dans le Système international d'unités (SI).

1 pouce vaut 2.54 cm (centimètres)
1 pied vaut 0.3048 m (mètre)
1 mille terrestre équivaut à 1.6093 km (kilomètre)

1 cm (centimètre) équivaut à 0.393 70 pouce
1 m (mètre) équivaut à 3.2808 pieds
1 km (kilomètre) équivaut à 0.621 37 mille

1 acre vaut 43 560 pieds carrés
1 acre équivaut à 0.404 69 ha (hectare)
1 mille carré vaut 640 acres
1 mille carré équivaut à 2.5900 $km^2$ (kilomètres carrés)
1 mille carré équivaut à 259.0 ha (hectare)

1 ha (hectare) vaut 10 000 $m^2$ (mètres carrés)
1 ha (hectare) équivaut à 2.4710 acres
1 $km^2$ (kilomètre carré) équivaut à 0.386 10 mille carré

1 pied cube équivaut à 6.2288 gallons impérials
1 gallon impérial vaut 4.546 09 L (litres)
1 gallon impérial équivaut à 1.2010 gallon américain
1 gallon américain équivaut à 0.133 68 pied cube
1 pied cube vaut 0.028 317 $m^3$ (mètre cube)
1 $m^3$ (mètre cube) vaut 35.315 pieds cubes
1 $dam^3$ (décamètre cube) vaut 1000 $m^3$ (mètres cubes)
1 $dam^3$ (décamètre cube) vaut 1 mm (millimètre) qui couvre 1 $km^2$ (kilomètre carré)

1 pied cube par seconde pendant un jour équivaut à 1.9835 acre-pied
1 pied cube par seconde pendant un jour équivaut à un volume d'un mille carré par 0.037 19 pouce
1 acre-pied équivaut à 1.2335 $dam^3$ (décamètres cubes)
1 $m^3/s$ (mètre cube par seconde) pour un jour vaut 86.4 $dam^3$ (décamètre cube)
1 $m^3/s$ (mètre cube par seconde) pour un jour couvre un kilomètre carré à une profondeur de 0.0864 m (mètre)

1 pied par seconde équivaut à 0.6818 mille par heure
1 mille par heure équivaut à 1.467 pied par seconde
1 m/s (mètre par seconde) vaut 3.6 km/h (kilomètre par heure)
1 km/h (kilomètre par heure) vaut 0.2778 m/s (mètre par seconde)

1 pied cube par seconde équivaut à 0.028 317 $m^3/s$ (mètre cube par seconde)
1 $m^3/s$ (mètre cube par seconde) équivaut à 35.315 pieds cubes par seconde

1 livre équivaut à 0.453 59 kg (kilogramme)
1 kg (kilogramme) équivaut à 2.2046 livres

1 tonne courte (2000 livres) équivaut à 0.907 18 t (tonne)
1 t (tonne) équivaut à 2204.6 livres

degrés Celsius = 5/9 (degrés Fahrenheit - 32)
degrés Fahrenheit = 9/5 (degrés Celsius) + 32

## DEFINITION OF TERMS AND ABBREVIATIONS

"Control" is the condition downstream from a gauging station that determines the stage-discharge relationship. It may be a stretch of rapids, a weir or other artificial structure. In the absence of such features, the control may be a less obvious condition such as a convergence of the channel or even simply the resistance to flow through a downstream reach. A shifting control exists where the stage-discharge relationship tends to change because of impermanent bed or banks.

"Cubic metres per second" ($m^3/s$) is a unit expressing rate of discharge. One cubic metre per second is equal to one cubic metre of water flowing past a particular point in one second. This is the basic unit in general use, other units being computed from it by the use of factors as given in the previous paragraph under "Equivalents of Measure".

"Gauging station" is a location where systematic records of stage or stage and discharge are obtained.

"Miscellaneous (or related) data" is all data not published in the regular series of hydrometric and sediment data publications such as unpublished water levels and the various parameters that are measured in obtaining discharge measurements, e.g. water depth, velocity, width, air and water temperatures, ice thickness. This also includes discharge measurements and water level and sediment observations obtained at locations which are not regular gauging stations. Various types of "derived" data could also be considered "miscellaneous", such as water levels and discharges at selected time intervals (usually hourly).

"Stage-discharge relationship" is the relation between the water level and the discharge at a gauging station.

## PUBLICATION OF SURFACE WATER AND SEDIMENT DATA

*Surface Water Data* have been published in a variety of formats in imperial units since 1908 in approximately 300 publications which are now mostly out-of-print. Commencing with the 1979 publications, data are presented in the International System of Units (SI). However, the format has remained the same wherein Canada is divided into eight regions. The provinces each represent a separate region except for New Brunswick, Newfoundland, Nova Scotia and Prince Edward Island which together form the Atlantic Provinces region, and the Yukon and Northwest Territories which make up another. The publications are identified by the province(s) or territories covered and the year in which data were collected. These data are published annually on a calendar-year basis and the stations are listed alphabetically, with two years of data per page.

## DÉFINITIONS DES TERMES ET ABRÉVIATIONS

«Élément régulateur» – élément qui conditionne l'écoulement en aval d'une station de jaugeage et qui détermine la relation hauteur-débit au niveau de la station. Ce peut être une série de rapides, un déversoir ou toute autre structure artificielle. En l'absence de ces structures, l'élément régulateur peut provenir d'une condition moins apparente comme le rétrécissement d'un chenal ou simplement la résistance à l'écoulement d'un tronçon situé en aval. Il y a élément régulateur changeant quand la relation hauteur-débit tend à être modifiée par un lit ou des rives instables.

«Mètres cubes par seconde» ($m^3/s$) – unité du taux d'écoulement. Un mètre cube par seconde équivaut à un mètre cube d'eau s'écoulant en un point donné en une seconde. C'est l'unité de base généralement employée, les autres unités dérivées à partir de celle-ci sont données sous la rubrique «Équivalences des unités de mesure».

«Station de jaugeage» – lieu où l'on effectue des relevés systématiques de la hauteur ou de la hauteur et du débit de l'eau.

«Les données diverses (ou connexes)» – représentent toutes les données qui ne sont pas publiées dans les séries régulières des publications sur les données hydrométriques et les sédiments, par exemple celles des niveaux des eaux et des autres paramètres qui sont mesurés en même temps que le débit, soit la profondeur de l'eau, sa vitesse, son étendue, la température de l'eau et de l'air, l'épaisseur de la glace. Les mesures de débit ainsi que les observations sur les niveaux des eaux et les sédiments, obtenues à des emplacements autres que les stations régulières de jaugeage, sont aussi incluses. D'autres types de données «dérivées» pourraient aussi être classées dans cette catégorie de données «diverses», à savoir les niveaux des eaux et les débits observés à des intervalles de temps précis (en général, toutes les heures).

«Relation hauteur-débit» – relation qui existe entre la hauteur et le débit au niveau d'une station de jaugeage.

## PUBLICATION DES DONNÉES SUR LES EAUX DE SURFACE ET LES SÉDIMENTS

Depuis 1908, les *Données sur les eaux de surface* ont été publiées, en utilisant diverses formules et en ayant recours au système d'unités impériales, dans quelque 300 publications lesquelles sont pour la plupart épuisées. À partir de 1979, les données sont fournies dans le Système international d'unités (SI). Toutefois, la présentation est toujours la même, c'est-à-dire que le Canada est divisé en huit régions. Chaque province représente une région distincte sauf le Nouveau-Brunswick, la Terre-Neuve, la Nouvelle-Écosse et l'Île-du-Prince-Édouard qui constituent la région des provinces de l'Atlantique, comme c'est le cas aussi pour le Yukon et les Territoires du Nord-Ouest qui sont réunis en une seule région. Les publications sont identifiées par le nom des provinces ou territoires concernés et par l'année de la cueillette des données. Les données sont publiées annuellement, en fonction de l'année civile, et les stations sont classées par ordre alphabétique, chaque page de données couvrant deux années.

The first edition of a *Surface Water Data Reference Index* was published for data to 1966 by province or region. Subsequent editions were published annually or biennially in one publication for Canada. Commencing with the 1979 publication, data are presented in the International System of Units (SI) and future editions will be published biennially. Gauging stations are listed by province or territory, in upstream to downstream order. Coloured maps showing the locations of both active and the discontinued stations were included in the first and second editions and were provided in a separate Hydrometric Map Supplement to the 1972 and the 1977 editions. The latest editions of the Reference Index and the Hydrometric Map Supplement supersede all previous editions.

The first edition of a publication series titled *Historical Streamflow Summary* was produced for data to 1970. Subsequent editions have been published every three years. This publication series contains a summary of historical monthly and annual mean discharges and annual extremes for the entire period of record for all stations where streamflow data have been collected during the history of the Water Survey of Canada. Data are published by province or region, as for the annual Surface Water Data publications. Commencing with the 1979 publications, data are presented in the International System of Units (SI). Editions subsequent to 1982 will be published every two years. The latest edition supersedes all previous editions, since it contains any corrections or additions since the last publication.

The first edition of a publication series titled *Historical Water Levels Summary* was produced for data to 1976. This publication series contains a summary of historical monthly and annual mean water levels and annual extremes for the period of record for all stations on lakes or reservoirs where water level data have been collected during the history of the Water Survey of Canada. It also contains a summary of water level data for all stations on rivers where "water levels only" were collected or for certain stations on rivers where streamflow data are collected, but the historical water level information is considered to be of sufficient demand to warrant inclusion in the publication (daily water levels for stations where streamflow data are collected are not normally published in the annual Surface Water Data publications). Data are published by province or region, as for the annual Surface Water Data publications. Commencing with the 1979 publications, data are presented in the International System of Units (SI). Editions subsequent to 1983 will be published every two years. The latest edition supersedes all previous editions, since it contains any corrections or additions since the last publication.

During the years 1948 to 1960, some sediment data were collected for several Prairie rivers to meet the needs of particular projects. The first Water Resources Paper series containing sediment data incorporated a selection of these data and also data for part of the year ending September 30, 1961, at stations established for the continuing program. The second issue was a biennial publication covering only the continuing program for the 1962 and 1963 water years. All subsequent editions titled *Sediment Data Canadian Rivers* have been published annually. The sediment data since 1978 have been presented entirely in the International System of Units (SI).

La première édition de l'*Index de référence des données sur les eaux de surface* comprenait les données disponibles jusqu'en 1966, de chaque province ou région. Les éditions subséquentes étaient publiées annuellement ou tous les deux ans en une seule publication pour tout le Canada. À partir de 1979, les données sont fournies dans le Système international d'unités (SI) et les éditions subséquentes vont paraître tous les deux ans. Les stations de jaugeage sont présentées par province ou territoire et placées dans l'ordre de leur position, d'amont en aval. Des cartes en couleurs, qui indiquent l'emplacement des stations hydrométriques en service, y compris celles qui ne le sont plus, ont paru dans les première et deuxième éditions ainsi que dans le *Supplément de cartes hydrométriques* de 1972 et de 1977. L'édition la plus récente de l'*Index de référence* et celle du *Supplément de cartes hydrométriques* annulent les éditions antérieures.

La première édition d'une série de publications intitulée *Sommaire chronologique de l'écoulement* renfermait les données disponibles jusqu'en 1970. Les éditions subséquentes étaient publiées tous les trois ans. Cette série de publications renferme un résumé des moyennes mensuelles et annuelles des débits ainsi que les débits extrêmes annuels pour toute la période d'enregistrement et pour toutes les stations où des données de débit sont recueillies par la Division des relevés hydrologiques du Canada. Les données sont publiées par province ou région, comme c'est le cas pour les publications annuelles des données sur les eaux de surface. À partir de 1979, les données sont fournies dans le Système international d'unités (SI). Les éditions subséquentes à 1982 vont paraître tous les deux ans. L'édition la plus récente annule toutes les éditions antérieures, car elle renferme toutes les corrections et mises à jour depuis la dernière parution.

La première édition d'une série de publications intitulée *Sommaire chronologique des niveaux d'eau* comprenait les données disponibles jusqu'en 1976. Cette série de publications contient un résumé des niveaux moyens mensuels et annuels ainsi que des niveaux extrêmes annuels pour la période d'enregistrement pour toutes les stations de lacs ou de réservoirs où des données sur les niveaux d'eau sont recueillies par la Division des relevés hydrologiques du Canada. Elle renferme également un résumé des niveaux d'eau pour toutes les stations de rivières effectuant «uniquement» des relevés de niveaux d'eau ou pour certaines stations de rivières où des données de débit sont recueillies de même que des données sur les niveaux d'eau qui peuvent répondre aux besoins des utilisateurs (en général, les niveaux d'eau quotidiens de stations effectuant des relevés de débit ne sont pas publiées dans les publications annuelles des données sur les eaux de surface). Les données sont publiées par province ou région, comme c'est le cas pour les publications annuelles des données sur les eaux de surface. À partir de 1979, les données sont fournies dans le Système international d'unités (SI). Les éditions subséquentes à 1983 vont paraître tous les deux ans. L'édition la plus récente annule toutes les éditions antérieures, car elle renferme toutes les corrections et mises à jour depuis la dernière parution.

De 1948 à 1960, on a recueilli des données pour plusieurs cours d'eau des Prairies en prévision de la réalisation de certains projets. La première publication contenant des données sur les sédiments a paru dans la série intitulée *Water Resources Paper*; elle présentait un choix de ces données ainsi que des données recueillies en 1961 avant le 30 septembre à des stations établies pour la réalisation du programme permanent. La deuxième publication a porté sur les données recueillies dans le cadre du programme au cours des années hydrologiques 1962 et 1963. Par la suite, les données ont été publiées annuellement sous le titre *Données sur les sédiments - rivières canadiennes*. Depuis 1978, les données sont exprimées en unités du Système international (SI).

Commencing with 1984, the *Sediment Data* are presented and published in a new format wherein Canada is divided into eight regions. The provinces each represent a separate region except for New Brunswick, Newfoundland, Nova Scotia and Prince Edward Island, which together form the Atlantic Provinces region, and the Yukon and Northwest Territories which make up another. The publications are identified by the province or territories covered and the year in which the data were collected. These data are published annually on a calendar-year basis and the stations are listed alphabetically.

The first edition of a *Sediment Data Reference Index* was published for data to 1972. It contains a tabulation of locations in Canada where sediment data were collected by the Water Survey of Canada. The index has been subdivided alphabetically by province or territory, with sediment survey stations also listed alphabetically. Commencing with the 1978 publication, data are presented in the International System of Units (SI) and will continue to be published biennially. The latest edition supersedes all previous editions because it contains any corrections or additions since the last publication.

The first edition of a new publication series titled *Historical Sediment Data Summary for Canadian Rivers* was produced for data to 1974. This publication contains a summary of historical monthly and annual mean suspended sediment load, and annual extremes of daily suspended sediment concentration and loads and total annual suspended load. Commencing with the 1978 publication, data are presented entirely in the International System of Units (SI). This publication has been discontinued, as much of the information is now included in the new annual *Sediment Data* publication.

## METHOD OF TABULATION OF SURFACE WATER DATA

For gauging stations where a systematic record of water level or discharge was obtained during the year under review, the following are given where available:

1. Table of daily water level or discharge;
2. Summary of monthly and annual data;
3. Descriptive information.

1. *The table of daily water level* or *discharge* gives the daily water level in metres or the daily discharge in cubic metres per second at the gauging station.

The following standard symbols are used opposite the daily stage or discharge to which they apply:

A – Manual Gauge – indicates that one or more manual gauge observations per day were obtained and used as the mean for the day for a gauging station equipped with a recording gauge. This symbol is used during open-water periods only.

B – Ice Conditions – indicates that for a gauging station where discharge data are obtained the presence of ice has affected the stage-discharge relationship.

E – Estimated – indicates any estimated data. It indicates that the value was determined by some indirect method such as interpolation, extrapolation, estimation from a graph of observed readings, comparison with other streams or by comparison with meteorological data.

En 1984, la présentation des données a été modifiée. Le Canada a été divisé en huit régions, une région pour chaque province, sauf le Nouveau-Brunswick, Terre-Neuve, la Nouvelle-Écosse et l'Île-du-Prince-Édouard qui, ensemble, forment la région des provinces de l'Atlantique, et les Territoires du Yukon et du Nord-Ouest, qui forment une autre région. Les publications sont nommées selon la région couverte et l'année des données (année civile). Ces publications sont annuelles. Les stations y sont présentées par ordre alphabétique.

Un *Index de référence des données sur les sédiments* est publié. La première édition portait sur les données disponibles jusqu'en 1972. Les emplacements où des données sur les sédiments ont été recueillies au Canada par la Division des relevés hydrologiques y sont présentés sous forme de tableau. L'*Index* est subdivisé selon l'ordre alphabétique par province ou territoire, et les stations de mesure des sédiments sont classées par ordre alphabétique. À partir de 1978, les données sont exprimées en unités du Système international (SI). L'*Index* est publié tous les deux ans; l'édition la plus récente annule toutes les éditions antérieures, car elle renferme toutes les corrections et mises à jour effectuées depuis la dernière parution.

Une autre série de publications a porté le titre *Sommaire chronologique des données sur les sédiments de rivières canadiennes*. La première édition renfermait les données disponibles jusqu'en 1974. Cette série présentait un résumé donnant les moyennes mensuelles et annuelles historiques du débit des sédiments en suspension, les valeurs annuelles extrêmes de la concentration journalière et du débit journalier des sédiments en suspension et le débit annuel total des sédiments en suspension. À partir de 1978, les données ont été présentées en unités du Système international (SI). Cette série a été abandonnée, car une bonne partie de l'information est maintenant contenue dans la nouvelle publication annuelle intitulée *Données sur les sédiments*.

## PRÉSENTATION SOUS FORME DE TABLEAUX DES DONNÉES SUR LES EAUX DE SURFACE

Pour les stations de jaugeage où on a effectué, au cours de l'année étudiée, un relevé systématique du débit ou du niveau, les données suivantes sont présentées, pour autant qu'elles soient disponibles:

1. un tableau du niveau ou du débit quotidien;
2. un extrait des données mensuelles et annuelles;
3. des renseignements descriptifs.

1. *Le tableau du niveau* ou *du débit quotidien* donne la hauteur des eaux, en mètres ou le débit, en mètres cubes par seconde, mesuré à la station de jaugeage.

Les symboles normalisés donnés ci-après sont inscrits à côté des valeurs auxquelles ils se rapportent:

A – Jauge manuelle – indique qu'on a effectué à une station de jaugeage dotée d'une jauge enregistreuse au moins une observation par jour à l'aide d'une jauge manuelle et qu'on s'en est servi comme moyenne pour la journée en question. Le symbole n'est employé qu'au cours de périodes d'eau libre.

B – Glaces – indique, pour les données portant sur le débit, que la présence de glaces à la station de jaugeage a faussé la relation hauteur-débit.

E – Estimatives – indique une donnée estimative, c'est-à-dire qu'on a déterminé la valeur de façon indirecte, par exemple par interpolation, extrapolation, à l'aide de graphique, ou par comparaison avec d'autres cours d'eau ou avec des données météorologiques.

2. *A summary of monthly and annual data* is given below the table of daily data.

For stations where only water level data are obtained, both a monthly and annual summary are given.

The monthly summary gives:
(a) the mean water level in metres for complete months;
(b) the maximum and minimum daily water level in metres.

The summary for the year gives:
(a) the mean water level in metres for complete years;
(b) the maximum and minimum daily water levels and their dates of first occurrence where applicable;
(c) the maximum instantaneous water level and the time of occurrence where available.

For stations where discharge data are collected, both a monthly and annual summary are given.

The monthly summary gives:
(a) the total of the daily discharge values for complete months;
(b) the mean discharge in cubic metres per second;
(c) the total discharge in cubic decametres;
(d) the maximum and minimum daily discharges in cubic metres per second.

The summary for the year or period gives:
(a) the mean discharge in cubic metres per second;
(b) the total discharge in cubic decametres;
(c) the maximum and minimum daily discharges and their dates of first occurrence;
(d) the maximum instantaneous discharge and the time of occurrence, where available.

3. *The descriptive information* about the gauging station is also given below the table of daily data and will indicate the following where applicable:

*International Gauging Stations* – on waters adjacent to the international boundary, certain gauging stations have been designated as "International" and records are approved jointly. Differences between figures published herein and corresponding figures in United States Water Supply Papers are due to variations in automated data processing techniques.

*Type of Gauge* – refers to the installation or method used to obtain water level or discharge data:

(a) Manual – a non-recording type of gauge from which observations of stage normally are obtained once daily.
(b) Recording – a water-stage recorder from which continuous water levels are obtained on an analog chart. For most International Gauging Stations located in the United States, water level records are obtained utilizing a digital recorder.
(c) Power Plant Rating – this indicates that records were obtained using the latest available rating of the Power Plant.

2. *Un extrait des données mensuelles et annuelles* est donné au-dessous du tableau des données quotidiennes.

Les extraits mensuels et annuels sont présentés dans le cas des stations où on n'a mesuré que le niveau.

L'extrait mensuel donne:
(a) le niveau moyen en mètres pour le mois entier, et
(b) les niveaux quotidiens maximal et minimal en mètres.

L'extrait annuel donne:
(a) le niveau moyen en mètres pour l'année entière;
(b) les niveaux quotidiens maximal et minimal ainsi que les dates de leur première observation, s'il y a lieu, et
(c) le niveau maximal instantané et l'heure de l'observation, s'il y a lieu.

Les extraits mensuels et annuels sont présentés dans le cas des stations où on n'a mesuré que le débit.

L'extrait mensuel donne:
(a) le total des valeurs quotidiennes du débit, pour le mois entier;
(b) le débit moyen en mètres cubes par seconde;
(c) le débit total en décamètres cubes, et
(d) les débits quotidiens maximal et minimal en mètres cubes par seconde.

L'extrait annuel ou périodique donne:
(a) le débit moyen en mètres cubes par seconde;
(b) le débit total en décamètres cubes;
(c) les débits quotidiens maximal et minimal ainsi que les dates de première observation, s'il y a lieu, et
(d) le débit maximal instantané et l'heure de l'observation, s'il y a lieu.

3. *Les renseignements descriptifs* sur les stations de jaugeage sont également présentés sous le tableau des données quotidiennes et apportent les précisions qui suivent, s'il y a lieu:

*Stations internationales de jaugeage* (International Gauging Stations) – Dans les eaux contiguës aux frontières, on a désigné certaines stations comme «internationales», et les données prélevées sont approuvées par les pays concernés. Les différences entre les chiffres publiés dans la présente publication et les *United States Water Supply Papers* proviennent de variantes dans les techniques de traitement automatique des données.

*Type de jauge* (Type of Gauge) – Il s'agit des jauges ou des méthodes de jaugeage utilisées pour obtenir les données sur le niveau et le débit d'un cours d'eau:

(a) Manuelle (Manual) – indique qu'un appareil non enregistreur sert à obtenir une fois par jour les données sur le niveau et le débit d'un cours d'eau.
(b) Enregistreuse (Recording) – indique qu'un limnigraphe permet de mesurer de façon continue le niveau des eaux tracé sur une carte analogique. La plupart des stations internationales de jaugeage des États-Unis obtiennent les données sur le niveau des eaux à l'aide d'un enregistreur numérique.
(c) Régime des stations hydrauliques (Power Plant Rating) – indique qu'on a obtenu les données grâce aux valeurs les plus récentes des régimes mesurés dans les stations hydrauliques.

*Location* – the latitude and longitude co-ordinates of the location of the gauge are given. For stations where the gauge is located an appreciable distance from the discharge measurement section, these co-ordinates give the location of the discharge measurement section.

*Drainage Area* – this is the latest available drainage area and refers to that area enclosed by a topographic divide such that direct surface runoff from precipitation would drain by gravity into the stream upstream from the location of the station. For a gauging station on a lake, this refers to the total drainage area at the outlet of the lake.

*Contributed Data* – if data were supplied in their entirety by an outside agency, the name of the co-operating agency is given.

*Natural Flow* or *Regulated* – where the flow is known to be natural, this is indicated. The flow of water in many river systems is affected by upstream regulation. In some cases, the extent of this regulation is not known and therefore is not indicated. However, where the regulation is known to be "appreciable", this is indicated as well as the year that the regulation began, if known.

*Gauge Datum* – for stations where only water level data are available, the name of the datum, to which water levels are referred, is given as well as an equation to convert to another datum if applicable. Detailed information on the description of the bench marks to which water levels are referred is available from the appropriate Regional Chief.

*Remarks* – unusual conditions which occur at a station are explained.

## REVISIONS

A number of corrections or revisions have been made to previously published data. Many of these were required because of typographical or computational errors which were exposed when daily discharges were stored on magnetic tape and monthly means were re-calculated by computer. Other errors were discovered or different interpretations of basic data were made during the systematic review of historical streamflow data presently underway, for example, these revisions may have been justified because a more reliable stage-discharge relationship had been developed.

Revisions to daily discharges or daily water levels are not published at present. However, those stations where a systematic review has been conducted are identified in the Surface Water Data Reference Index publication. The Historical Streamflow Summary publications contain revisions to monthly and annual mean discharges, and annual extremes of discharge. The Historical Water Levels Summary publications contain revisions to monthly and annual mean water levels, and annual extremes of water level. Recent revisions, corrections or additions made to the historical discharges and water levels are indicated by an "R" symbol in the summary publications. This "R" symbol is deleted from the data bank after publication of the summaries. Detailed information on revisions to historical data is available from the appropriate Regional Chief.

*Emplacement* (Location) – La latitude et la longitude de la station de jaugeage sont indiquées. Dans les cas où l'équipement de mesure est situé à un endroit éloigné de la section où le jaugeage est effectué, on indique les coordonnées de cette section.

*Superficie du bassin versant* (Drainage Area) – Il s'agit de la superficie du bassin versant déterminée d'après les cartes les plus récentes et désigne la zone délimitée par une ligne de partage des eaux de sorte que l'écoulement d'averse est entraîné par gravité vers le cours d'eau en amont de la station. S'il s'agit d'une station située sur un lac, elle représente la superficie totale jusqu'à l'émissaire du lac.

*Données fournies* (Contributed Data) – Nom de l'organisme extérieur qui a fourni les données.

*Débit naturel* ou *régularisé* (Natural Flow or Regulated) – Un débit reconnu comme naturel est indiqué comme tel. Le débit de plusieurs réseaux hydrographiques est modifié par une régularisation qui est effectuée en amont. Il arrive parfois que l'importance de cette régularisation ne soit pas connue, et elle n'est donc pas indiquée. Cependent, quand on sait que la régularisation est d'une certaine importance, on l'indique ainsi que l'année où elle a débuté (si elle est connue).

*Plan de référence des jauges* (Gauge Datum) – Pour les stations dans lesquelles on ne mesure que le niveau de l'eau, on indique le plan de référence de la jauge en question et l'équation permettant, au besoin, de convertir ce plan en un autre plan. En s'adressant au chef régional concerné, on peut obtenir des renseignements plus précis au sujet des niveaux de référence auxquels correspondent les niveaux mesurés.

*Remarques* (Remarks) – Les conditions inhabituelles qui prévalent à une station sont expliquées.

## RÉVISIONS

On a corrigé ou révisé beaucoup de données déjà publiées. Il a été nécessaire d'effectuer plusieurs corrections, car on a relevé des erreurs typographiques ou de calculs lorsqu'on a enregistré les débits quotidiens sur rubans magnétiques et qu'on a recalculé à l'aide d'ordinateurs les moyennes mensuelles. On a aussi relevé d'autres erreurs ou fait des interprétations différentes de données de base au cours de la révision rétrospective systématique des données de débit qu'on est à faire en ce moment. Ainsi, on peut justifier des corrections, par le fait qu'on ait trouvé une relation hauteur-débit plus sûre.

Les corrections apportées aux débits quotidiens ou aux niveaux d'eau quotidiens ne sont pas publiées, du moins pour le moment. Cependant, les stations où on a effectué une révision systématique sont identifiées dans l'*Index de référence des données sur les eaux de surface*. Les publications intitulées *Sommaire chronologique de l'écoulement* contiennent des données sur les moyennes mensuelles et annuelles des débits et sur les extrêmes annuels des débits qu'on a révisées. Les publications intitulées *Sommaire chronologique des niveaux d'eau* renferment les révisions apportées aux niveaux moyens mensuels et annuels ainsi que les extrêmes annuels. Les révisions et corrections apportées récemment aux débits chronologiques et aux niveaux d'eau sont accompagnées du symbole «R» dans les publications sommaires. Ce symbole «R» est omis de la banque de données après la publication des sommaires. On peut obtenir plus de détails sur les révisions en s'adressant au chef régional concerné.

## ACCURACY OF HYDROMETRIC DATA

The overall accuracy or the degree of reliability of hydrometric data referred to herein, depends upon

(1) The type of gauge, stability of gauge, accuracy of observation of stage and measurement of reference datum,

(2) The stability of the stage-discharge relationship; or if the control is unstable, the frequency and accuracy of discharge measurements, and

(3) The computation procedures and interpretation of records.

Because of all these variable factors, the number of significant figures used herein has been standardized for uniformity of presentation and does not reflect the degree of accuracy of the data. The Water Resources Branch standard for storing water level data is to three decimal points (0.001 m), although some contributing agencies provide data to two decimal points (0.01 m).

A measure of the reliability of the records can be made by an examination of the distribution of the symbols A, E and B (for discharge data).

In general, data collected during open-water periods are more reliable than those collected during periods of ice conditions or those obtained by estimation. Further, water level data collected utilizing a water-stage recorder are more reliable and accurate than those using a manual gauge only, especially for small or flashy streams.

## EXACTITUDE DES DONNÉES HYDROMÉTRIQUES

La précision totale ou le degré d'exactitude des données hydrométriques dont on parle ici sont basés sur

(1) Le type de jauge, la stabilité de la gauge, la précision des observations sur les niveaux et de la mesure de la donnée de référence,

(2) La stabilité de la relation hauteur-débit ou, si l'élément régulateur est changeant, sur la fréquence et la précision des mesures de débits, et

(3) L'évaluation des procédés et l'interprétation des chiffres.

À cause de toutes les variables déjà mentionnées, on a normalisé pour des fins d'uniformité de présentation le nombre de chiffres significatifs, mais ceci ne réflète pas le degré d'exactitude des données. Dans la Direction des ressources en eau, les normes de cueillette des données sur le niveau des eaux sont de l'ordre de trois décimales (0.001 m), alors que certains organismes dans ce domaine n'exigent que deux décimales (0.01 m).

L'exactitude des données peut être appréciée par l'examen de la répartition des symboles A, E et B (pour les données de débits).

En général, les données recueillies au cours des périodes d'eau libre sont plus sûres que celles qui sont obtenues au cours des périodes de glaces ou par estimation. De plus, les données sur le niveau des eaux qui sont mesurées à l'aide d'un limnigraphe sont plus certaines et plus exactes que celles qui sont mesurées à l'aide d'une jauge manuelle seulement, surtout dans le cas de petits cours d'eau ou de cours d'eau à crues très rapides.

ANGLING RIVER NEAR BIRD - STATION NO. OSUH001

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.4288 | 0.3728 | 0.3708 | 0.3708 | --- | 45.3 | 4.83 | 1.39 | 0.838 | 8.38E | 2.80 B | 0.4328 | 1 |
| 2 | 0.4208 | 0.3728 | 0.3708 | 0.3708 | --- | 40.8 | 4.81 | 1.32 | 0.853 | 8.40E | 2.60 B | 0.4208 | 2 |
| 3 | 0.4128 | 0.3728 | 0.3708 | 0.3708 | --- | 37.0 | 5.22 | 1.21 | 0.801 | 8.10A | 2.40 B | 0.4008 | 3 |
| 4 | 0.4088 | 0.3728 | 0.3708 | 0.3708 | --- | 33.7 | 5.09 | 1.00 | 0.838 | 8.06 | 2.20 B | 0.3878 | 4 |
| 5 | 0.4048 | 0.3728 | 0.3708 | 0.3708 | --- | 30.6 | 5.98 | 0.948 | 0.879 | 5.88 | 2.04 B | 0.3908 | 5 |
| 6 | 0.4008 | 0.3728 | 0.3708 | 0.3708 | --- | 28.7 E | 5.85 | 0.918 | 1.03 | 5.42 | 1.92 B | 0.3838 | 6 |
| 7 | 0.4008 | 0.3728 | 0.3708 | 0.3708 | --- | 27.0 E | 5.80 | 0.941 | 1.31 | 5.16 | 1.76 B | 0.3768 | 7 |
| 8 | 0.3978 | 0.3728 | 0.3708 | 0.3728 | --- | 25.1 E | 5.49 | 0.880 | 1.51 | 5.38 | 1.65 B | 0.3708 | 8 |
| 9 | 0.3978 | 0.3728 | 0.3708 | 0.3728 | --- | 23.2 E | 4.79 | 0.909 | 1.87 | 5.28 | 1.52 B | 0.3808 | 9 |
| 10 | 0.3978 | 0.3728 | 0.3708 | 0.3728 | --- | 21.6 E | 4.85 | 0.827 | 2.81 | 5.01 | 1.44 B | 0.3638 | 10 |
| 11 | 0.3958 | 0.3728 | 0.3708 | 0.3728 | --- | 18.5 E | 4.49 | 0.729 | 3.37 | 4.88 | 1.37 B | 0.3608 | 11 |
| 12 | 0.3958 | 0.3728 | 0.3708 | 0.3728 | --- | 18.4 E | 4.65 | 0.806 | 4.18 | 5.35 | 1.25 B | 0.3488 | 12 |
| 13 | 0.3928 | 0.3728 | 0.3708 | 0.3728 | --- | 16.8 E | 3.84 | 0.713 | 4.84 | 5.39 | 1.19 B | 0.3458 | 13 |
| 14 | 0.3908 | 0.3728 | 0.3708 | 0.3728 | --- | 13.1 A | 4.12 | 0.801 | 4.41 | 5.33 | 1.07 B | 0.3408 | 14 |
| 15 | 0.3888 | 0.3728 | 0.3708 | 0.3728 | --- | 11.9 | 3.78 | 0.889 | 4.48 | 5.31 | 1.01 B | 0.3388 | 15 |
| 16 | 0.3888 | 0.3708 | 0.3708 | 0.3728 | --- | 11.2 | 3.84 | 0.837 | 4.88 | 5.08 | 0.9558 | 0.3308 | 16 |
| 17 | 0.3868 | 0.3708 | 0.3708 | 0.3728 | --- | 10.1 | 3.34 | 0.881 | 4.80 | 5.48 | 0.8808 | 0.3228 | 17 |
| 18 | 0.3868 | 0.3708 | 0.3708 | 0.3728 | --- | 9.53 | 2.87 | 0.877 | 4.88 | 4.88 | 0.8508 | 0.3188 | 18 |
| 19 | 0.3858 | 0.3708 | 0.3708 | 0.3728 | --- | 10.2 | 2.87 | 0.802 | 4.85 | 5.40 | 0.7928 | 0.3128 | 19 |
| 20 | 0.3808 | 0.3708 | 0.3708 | 0.3728 | --- | 9.82 | 2.55 | 0.874 | 5.48 | 4.75 | 0.7608 | 0.3068 | 20 |
| 21 | 0.3808 | 0.3708 | 0.3708 | 0.3758 | --- | 9.74 | 2.17 | 0.472 | 6.09 | 4.48 | 0.7128 | 0.3008 | 21 |
| 22 | 0.3778 | 0.3708 | 0.3708 | 0.3758 | --- | 8.60 | 1.93 | 0.532 | 6.48 | 4.53 | 0.6728 | 0.2948 | 22 |
| 23 | 0.3778 | 0.3708 | 0.3708 | 0.3758 | --- | 7.78 | 1.88 | 0.535 | 6.82 | 4.52 | 0.6338 | 0.2958 | 23 |
| 24 | 0.3778 | 0.3708 | 0.3708 | 0.3758 | --- | 7.17 | 1.81 | 0.445 | 7.20 | 4.48 | 0.5858 | 0.2948 | 24 |
| 25 | 0.3758 | 0.3708 | 0.3708 | 0.3758 | --- | 6.82 | 1.47 | 0.470 | 7.24 | 4.39 | 0.5708 | 0.2928 | 25 |
| 26 | 0.3758 | 0.3708 | 0.3708 | 0.3778 | --- | 6.02 | 1.36 | 0.584 | 7.25 | 4.80 | 0.5358 | 0.2888 | 26 |
| 27 | 0.3728 | 0.3708 | 0.3708 | 0.3858 | --- | 5.12 | 1.17 | 0.808 | 6.85 | 4.15 | 0.5008 | 0.2848 | 27 |
| 28 | 0.3728 | 0.3708 | 0.3708 | 0.4188 | --- | 5.16 | 1.23 | 0.644 | 6.16 | 3.88 | 0.4788 | 0.2828 | 28 |
| 29 | 0.3728 | | 0.3708 | 0.8568 | --- | 5.24 | 1.31 | 0.730 | 6.10 A | 3.498 | 0.4588 | 0.2828 | 29 |
| 30 | 0.3728 | | 0.3708 | 0.8908 | --- | 4.84 | 1.32 | 0.708 | 6.25 E | 3.288 | 0.4408 | 0.2808 | 30 |
| 31 | 0.3728 | | 0.3708 | | 45.2A | | 1.38 | 0.742 | | 3.008 | | 0.2788 | 31 |
| TOTAL | 12.087 | 10.380 | 11.470 | 11.825 | --- | 508.84 | 108.01 | 23.388 | 125.118 | 153.42 | 38.088 | 10.380 | TOTAL |
| MEAN | 0.389 | 0.371 | 0.370 | 0.388 | --- | 17.0 | 3.42 | 0.755 | 4.17 | 4.95 | 1.20 | 0.334 | MEAN |
| MAX | 0.428 | 0.372 | 0.370 | 0.890 | --- | 45.3 | 5.98 | 1.39 | 7.25 | 5.40 | 2.80 | 0.432 | MAX |
| MIN | 0.372 | 0.370 | 0.370 | 0.370 | --- | 4.84 | 1.17 | 0.445 | 0.801 | 3.00 | 0.440 | 0.278 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MINIMUM DAILY, 0.2788 ON DEC 31

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 55 40 38 N
LONG 93 38 20 W
DRAINAGE AREA, 1 580 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 1 040 | JUL | 9 180 |
| FEB | 888 | AUG | 2 020 |
| MAR | 991 | SEP | 10 800 |
| APR | 1 030 | OCT | 13 300 |
| MAY | --- | NOV | 3 120 |
| JUN | 44 100 | DEC | 888 |

ANTLER RIVER NEAR MELITA - STATION NO. OSMF002

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0B | 0B | 0B | 0 B | 0.337 | 0.018 | 0 | 0 | 0 | 0 | 0 | 0B | 1 |
| 2 | 0B | 0B | 0B | 0.237B | 0.321 | 0.018 | 0 | 0 | 0 | 0 | 0 | 0B | 2 |
| 3 | 0B | 0B | 0B | 0.287B | 0.308 | 0.018 | 0 | 0 | 0 | 0 | 0 | 0B | 3 |
| 4 | 0B | 0B | 0B | 0.537B | 0.278 | 0.014 | 0 | 0 | 0 | 0 | 0 | 0B | 4 |
| 5 | 0B | 0B | 0B | 8.54 B | 0.248 | 0.013 | 0 | 0 | 0 | 0 | 0 | 0B | 5 |
| 6 | 0B | 0B | 0B | 14.5 B | 0.227 | 0.012 | 0 | 0 | 0 | 0 | 0 | 0B | 6 |
| 7 | 0B | 0B | 0B | 10.8 B | 0.211 | 0.012 | 0 | 0 | 0 | 0 | 0 | 0B | 7 |
| 8 | 0B | 0B | 0B | 7.10 B | 0.188 | 0.012 | 0 | 0 | 0 | 0 | 0 | 0B | 8 |
| 9 | 0B | 0B | 0B | 4.78 | 0.188 | 0.010 | 0 | 0 | 0 | 0 | 0 | 0B | 9 |
| 10 | 0B | 0B | 0B | 3.27 | 0.153 | 0.008 | 0 | 0 | 0 | 0 | 0 | 0B | 10 |
| 11 | 0B | 0B | 0B | 2.11 | 0.134 | 0.008 | 0 | 0 | 0 | 0 | 0 | 0B | 11 |
| 12 | 0B | 0B | 0B | 1.48 | 0.112 | 0.012 | 0 | 0 | 0 | 0 | 0 | 0B | 12 |
| 13 | 0B | 0B | 0B | 1.37 | 0.082 | 0.012 | 0 | 0 | 0 | 0 | 0B | 0B | 13 |
| 14 | 0B | 0B | 0B | 1.18 | 0.082 | 0.010 | 0 | 0 | 0 | 0 | 0B | 0B | 14 |
| 15 | 0B | 0B | 0B | 1.07 | 0.080 | 0.008 | 0 | 0 | 0 | 0 | 0B | 0B | 15 |
| 16 | 0B | 0B | 0B | 0.880 | 0.037 | 0.008 | 0 | 0 | 0 | 0 | 0B | 0B | 16 |
| 17 | 0B | 0B | 0B | 0.888 | 0.040A | 0.008 | 0 | 0 | 0 | 0 | 0B | 0B | 17 |
| 18 | 0B | 0B | 0B | 0.788 | 0.108 | 0.008 | 0 | 0 | 0 | 0 | 0B | 0B | 18 |
| 19 | 0B | 0B | 0B | 0.728 | 0.108 | 0.004 | 0 | 0 | 0 | 0 | 0B | 0B | 19 |
| 20 | 0B | 0B | 0B | 0.677 | 0.088 | 0.003 | 0 | 0 | 0 | 0 | 0B | 0B | 20 |
| 21 | 0B | 0B | 0B | 0.822 | 0.084 | 0.001 | 0 | 0 | 0 | 0 | 0B | 0B | 21 |
| 22 | 0B | 0B | 0B | 0.880 | 0.080 | 0 | 0 | 0 | 0 | 0 | 0B | 0B | 22 |
| 23 | 0B | 0B | 0B | 0.803 | 0.033 | 0 | 0 | 0 | 0 | 0 | 0B | 0B | 23 |
| 24 | 0B | 0B | 0B | 0.471 | 0.033 | 0 | 0 | 0 | 0 | 0 | 0B | 0B | 24 |
| 25 | 0B | 0B | 0B | 0.430 | 0.029 | 0 | 0 | 0 | 0 | 0 | 0B | 0B | 25 |
| 26 | 0B | 0B | 0B | 0.417 | 0.027 | 0 | 0 | 0 | 0 | 0 | 0B | 0B | 26 |
| 27 | 0B | 0B | 0B | 0.403 | 0.023 | 0 | 0 | 0 | 0 | 0 | 0B | 0B | 27 |
| 28 | 0B | 0B | 0B | 0.388 | 0.020 | 0 | 0 | 0 | 0 | 0 | 0B | 0B | 28 |
| 29 | 0B | | 0B | 0.377 | 0.018 | 0.010 | 0 | 0 | 0 | 0 | 0B | 0B | 29 |
| 30 | 0B | | 0B | 0.368 | 0.018 | 0.007 | 0 | 0 | 0 | 0 | 0B | 0B | 30 |
| 31 | 0B | | 0B | | 0.018 | | 0 | 0 | | 0 | | 0B | 31 |
| TOTAL | 0 | 0 | 0 | 85.808 | 3.832 | 0.220 | 0 | 0 | 0 | 0 | 0 | 0 | TOTAL |
| MEAN | 0 | 0 | 0 | 2.19 | 0.117 | 0.007 | 0 | 0 | 0 | 0 | 0 | 0 | MEAN |
| MAX | 0 | 0 | 0 | 14.5 | 0.337 | 0.018 | 0 | 0 | 0 | 0 | 0 | 0 | MAX |
| MIN | 0 | 0 | 0 | 0 | 0.018 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.181
MAXIMUM DAILY, 14.5B ON APR 6
MINIMUM DAILY, 0B ON JAN 1
MAXIMUM INSTANTANEOUS,
15.8B AT 05:04 CST ON APR 6

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 03 34 N
LONG 101 02 55 W
DRAINAGE AREA, 3 210 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 0 | JUL | 0 |
| FEB | 0 | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 8 880 | OCT | 0 |
| MAY | 314 | NOV | 0 |
| JUN | 19.0 | DEC | 0 |

TOTAL DISCHARGE, 9 020 dam³

## ARROW RIVER NEAR ARROW RIVER - STATION NO. 05MD001

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0.0118 | 0.017 | 0.001 | 0.215 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0.1422 | 0.013 | 0.001 | 0.139 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0.3356 | 0.010 | 0.001 | 0.080 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0.6805 | 0.008 | 0.001 | 0.043 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0.868A | 0.008 | 0.001 | 0.035 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0.480 | 0.013 | 0.001 | 0.034 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.331 | 0.010 | 0 | 0.024 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.388 | 0.008 | 0 | 0.018 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.364 | 0.007 | 0 | 0.013 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.216 | 0.002 | 0 | 0.008 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.145 | 0.001 | 0 | 0.003 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.126 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.118 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.128 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.127 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.128 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.123 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.078 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.053 | 0.001 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.050 | 0.008 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.038 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.032 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.082 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.078 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.136 | 0.006 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.081 | 0.048 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.053 | 0.034 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.044 | 0.015 | 0.085 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | --- | 0B | 0.032 | 0.008 | 0.288 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | --- | 0B | 0.030 | 0.006 | 0.314 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0.002 | | 0 | 0 | | 0 | --- | --- | 31 |
| TOTAL | --- | --- | 0 | 5.449 | 0.239 | 0.885 | 0.818 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.182 | 0.008 | 0.023 | 0.020 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.868 | 0.048 | 0.314 | 0.215 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.011 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.028
MAXIMUM DAILY, 0.868E ON APR 4
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
1.02 AT 11:02 CST ON APR 5

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 05 10 N
LONG 100 07 30 W
DRAINAGE AREA, 870 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 83.2 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 471 | OCT | 0 |
| MAY | 20.6 | NOV | --- |
| JUN | 89.2 | DEC | --- |

TOTAL DISCHARGE, 664 dam³

## ASSINIBOINE RIVER AT HEADINGLEY - STATION NO. 05MJ001

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.608 | 4.838 | 6.888 | 10.88 | 38.1 | 12.1 | 14.3 | 4.37 | 6.18 | 12.8 | 8.88 | 8.448 | 1 |
| 2 | 5.638 | 4.848 | 6.488 | 10.88 | 37.0 | 11.4 | 14.3 | 4.88 | 6.12 | 12.3 | 7.488 | 8.788 | 2 |
| 3 | 5.588 | 4.818 | 6.498 | 11.28 | 30.3 | 10.7 | 13.8 | 4.43 | 6.18 | 13.0 | 8.608 | 8.308 | 3 |
| 4 | 5.608 | 5.018 | 6.878 | 11.88 | 26.0 | 10.4 | 13.7 | 4.84 | 6.18 | 18.6 | 7.888 | 8.238 | 4 |
| 5 | 5.488 | 5.308 | 8.888 | 12.08 | 21.8 | 10.1 | 14.3 | 4.18 | 8.27 | 17.7 | 8.408 | 8.478 | 5 |
| 6 | 5.388 | 5.308 | 8.438 | 12.88 | 21.8 | 9.87 | 12.8 | 4.38 | 8.71 | 14.8 | 8.878 | 10.2 B | 6 |
| 7 | 5.238 | 5.248 | 8.438 | 14.18 | 24.3 | 11.2 | 11.8 | 4.81 | 8.83 | 13.6 | 7.845 | 10.8 B | 7 |
| 8 | 5.108 | 5.488 | 8.888 | 20.48 | 24.1 | 10.3 | 11.3 | 4.24 | 8.14 | 12.8 | 7.328 | 10.4 B | 8 |
| 9 | 5.038 | 5.198 | 7.048 | 34.88 | 22.1 | 10.3 | 11.0 A | 4.02 | 8.82 | 8.87 | 13.1 B | 10.4 B | 9 |
| 10 | 5.008 | 4.838 | 7.048 | 84.88 | 19.7 | 9.88 | 10.1 | 3.88 | 7.31 | 8.89 | 18.0 B | 10.7 B | 10 |
| 11 | 5.048 | 5.308 | 7.378 | 128 B | 16.4 | 9.71 | 10.0 | 3.41 | 7.88 | 8.88 | 18.8 B | 10.6 B | 11 |
| 12 | 4.888 | 5.478 | 7.388 | 126 B | 17.7 | 10.7 | 10.3 | 3.14 | 6.36 | 7.68 | 23.8 B | 10.3 B | 12 |
| 13 | 4.738 | 5.648 | 7.408 | 116 B | 15.8 | 13.3 | 10.8 | 3.00 | 8.81 | 8.80 | 19.8 B | 10.3 B | 13 |
| 14 | 4.748 | 5.888 | 7.788 | 104 B | 15.5 | 14.4 | 9.88 | 2.88 | 8.87 | 8.85 | 14.8 B | 9.838 | 14 |
| 15 | 4.808 | 5.848 | 7.828 | 104 B | 15.8 | 15.3 | 9.18 | 2.84 | 10.1 | 8.84 | 14.2 B | 9.718 | 15 |
| 16 | 4.878 | 5.748 | 7.818 | 110 B | 15.7 | 15.7 | 8.82 | 3.27 | 8.88 | 8.83 | 10.8 B | 8.738 | 16 |
| 17 | 4.378 | 5.808 | 7.848 | 108 B | 15.8 | 15.8 | 8.82 | 3.88 | 8.23 | 8.79 | 8.338 | 8.708 | 17 |
| 18 | 4.868 | 5.888 | 8.388 | 108 B | 15.8 | 15.7 | 7.83 | 4.38 | 8.88 | 11.8 | 7.888 | 8.838 | 18 |
| 19 | 3.885 | 5.888 | 8.308 | 113 B | 15.1 | 13.4 | 7.18 | 4.78 | 8.82 | 11.8 | 8.388 | 8.848 | 19 |
| 20 | 3.788 | 5.828 | 8.718 | 108 B | 13.8 | 12.7 | 8.72 | 4.87 | 8.17 | 11.3 | 8.388 | 8.178 | 20 |
| 21 | 3.918 | 5.888 | 8.388 | 92.18 | 14.2 | 11.8 | 8.83A | 5.83 | 7.88 | 10.8 | 8.388 | 8.248 | 21 |
| 22 | 4.188 | 6.848 | 8.268 | 84.18 | 15.2 | 10.1 | 8.82 | 8.82 | 7.48 | 10.8 | 7.828 | 8.888 | 22 |
| 23 | 4.188 | 6.278 | 8.838 | 78.8 | 13.7 | 9.71 | 8.84 | 8.77 | 8.72 | 11.8 | 7.338 | 8.888 | 23 |
| 24 | 4.888 | 6.488 | 8.788 | 71.4 | 13.4 | 9.32 | 8.34 | 8.71 | 8.87 | 11.7 | 8.388 | 8.388 | 24 |
| 25 | 4.288 | 6.688 | 8.818 | 67.8 | 13.1 | 9.32 | 8.81 | 8.37 | 9.83 | 12.8 | 10.8 B | 8.298 | 25 |
| 26 | 4.388 | 6.388 | 8.778 | 80.4 | 13.8 | 9.35 | 8.81 | 8.87 | 8.44 | 13.8 | 10.7 B | 8.118 | 26 |
| 27 | 4.388 | 6.428 | 8.268 | 83.8 | 13.8 | 8.31 | 8.84 | 8.38 | 7.12 | 13.4 | 8.788 | 8.188 | 27 |
| 28 | 4.478 | 6.838 | 8.738 | 48.4 | 13.7 | 10.4 | 8.38 | 8.88 | 10.7 | 13.1 | 8.388 | 8.188 | 28 |
| 29 | 4.818 | | 10.1 B | 44.8 | 12.8 | 13.3 | 8.88 | 8.74 | 12.7 | 11.7 | 7.888 | 8.888 | 29 |
| 30 | 4.888 | | 10.3 B | 38.2 | 11.8 | 13.4 | 8.88 | 8.88 | 12.8 | 11.1 | 7.778 | 8.778 | 30 |
| 31 | 4.888 | | 10.4 B | | 12.4 | | 8.18 | 8.84 | | 10.3 | | 8.888 | 31 |
| TOTAL | 148.38 | 158.37 | 248.88 | 1 888.8 | 570.8 | 347.87 | 288.18 | 144.88 | 248.24 | 384.33 | 317.82 | 287.87 | TOTAL |
| MEAN | 4.72 | 5.88 | 8.83 | 88.8 | 18.4 | 11.8 | 8.88 | 4.87 | 8.17 | 11.4 | 10.8 | 8.88 | MEAN |
| MAX | 8.88 | 8.83 | 10.4 | 128 | 38.1 | 18.7 | 14.3 | 8.77 | 12.7 | 17.7 | 23.8 | 10.8 | MAX |
| MIN | 3.78 | 4.81 | 8.43 | 10.8 | 11.8 | 8.31 | 8.88 | 2.88 | 8.13 | 8.88 | 8.87 | 8.84 | MIN |

### SUMMARY FOR THE YEAR 1988

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 14.0
MAXIMUM DAILY, 128B ON APR 11
MINIMUM DAILY, 2.88 ON AUG 14
MAXIMUM INSTANTANEOUS,
130B AT 00:31 CST ON APR 12

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 52 08 N
LONG 97 24 10 W
DRAINAGE AREA, 153 000 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 13 800 | JUL | 33 800 |
| FEB | 13 700 | AUG | 13 800 |
| MAR | 21 600 | SEP | 21 300 |
| APR | 172 000 | OCT | 36 800 |
| MAY | 48 300 | NOV | 27 400 |
| JUN | 30 000 | DEC | 25 700 |

TOTAL DISCHARGE, 439 000 dam³

## ASSINIBOINE RIVER NEAR BRANDON - STATION NO. 05MH013

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4.788 | 4.788 | 7.388 | 9.338 | 10.8 | 4.18 | 8.37 | 2.98 | 7.88 | 3.38 | 8.38 | 8.038 | 1 |
| 2 | 4.788 | 4.838 | 7.478 | 15.8 B | 10.2 | 4.33 | 7.78 | 2.33 | 8.18 | 3.24 | 8.88 | 8.888 | 2 |
| 3 | 4.888 | 4.818 | 7.488 | 23.3 B | 9.87 | 4.17 | 7.88 | 3.33 | 8.77 | 3.24 | 8.88 | 8.728 | 3 |
| 4 | 4.788 | 4.888 | 7.488 | 27.8 B | 9.84 | 3.88 | 8.88 | 3.28 | 9.37 | 3.38 | 8.418 | 8.578 | 4 |
| 5 | 4.888 | 4.888 | 7.188 | 27.8 B | 8.48 | 3.88 | 8.28 | 3.83 | 9.38 | 3.83 | 8.388 | 8.418 | 5 |
| 6 | 5.138 | 4.838 | 7.188 | 28.8 B | 8.13 | 3.81 | 8.88 | 2.83 | 8.81 | 4.38 | 8.18 | 8.388 | 6 |
| 7 | 5.138 | 4.888 | 7.888 | 24.8 B | 7.78 | 4.88 | 8.28 | 2.88 | 8.88 | 8.88 | 8.38 | 8.488 | 7 |
| 8 | 5.838 | 4.738 | 7.888 | 23.7 B | 7.73 | 4.14 | 4.87 | 3.84 | 7.14 | 8.88 | 8.88 | 8.888 | 8 |
| 9 | 5.848 | 4.888 | 7.878 | 23.8 B | 7.88 | 3.78 | 8.38 | 3.88 | 8.83 | 7.88 | 11.2 | 8.838 | 9 |
| 10 | 4.888 | 4.418 | 8.138 | 23.8 B | 7.32 | 3.48 | 8.88 | 1.83 | 8.23 | 7.82 | 12.1 B | 8.448 | 10 |
| 11 | 4.878 | 4.418 | 7.788 | 21.8 B | 6.84 | 3.38 | 4.88 | 1.88 | 8.28 | 8.37 | 11.8 B | 8.788 | 11 |
| 12 | 4.818 | 4.488 | 7.888 | 21.8 B | 6.48 | 3.28 | 4.18 | 3.88 | 8.72 | 8.11 | 11.4 B | 10.8 B | 12 |
| 13 | 4.888 | 4.818 | 7.878 | 20.4 B | 6.87 | 3.83 | 3.87 | 3.12 | 4.88 | 8.88 | 11.4 B | 10.8 B | 13 |
| 14 | 4.718 | 4.878 | 7.888 | 20.3 B | 6.81 | 3.82 | 3.31 | 3.83 | 4.28 | 7.88 | 11.2 B | 9.888 | 14 |
| 15 | 4.828 | 4.838 | 7.848 | 21.1 B | 6.48 | 3.74 | 3.17 | 3.88 | 4.24 | 8.41 | 11.1 B | 9.898 | 15 |
| 16 | 4.488 | 4.878 | 7.718 | 21.4 B | 6.18 | 3.74 | 3.83 | 3.18 | 4.88 | 8.88 | 11.8 B | 9.838 | 16 |
| 17 | 4.218 | 4.818 | 7.818 | 20.8 B | 6.31 | 3.78 | 2.82 | 3.83 | 4.18 | 10.4 | 10.8 B | 9.888 | 17 |
| 18 | 4.228 | 4.818 | 7.848 | 21.2 B | 6.44 | 4.88 | 3.17 | 8.84 | 4.88 | 10.7 | 10.7 B | 9.818 | 18 |
| 19 | 4.418 | 4.788 | 7.788 | 18.4 B | 6.83 | 8.88 | 3.22 | 8.83 | 4.83 | 10.7 | 10.8 B | 9.888 | 19 |
| 20 | 4.288 | 8.888 | 7.828 | 18.2 B | 8.78 | 7.87 | 3.44 | 8.24 | 4.11 | 10.2 | 10.4 B | 8.858 | 20 |
| 21 | 4.488 | 8.828 | 7.868 | 18.8 B | 8.83 | 8.38 | 3.88 | 8.87 | 4.83 | 8.81 | 10.3 B | 8.788 | 21 |
| 22 | 4.218 | 8.148 | 7.838 | 17.7 B | 6.88 | 11.8 | 4.13 | 8.72 | 3.74 | 8.88 | 10.2 B | 8.788 | 22 |
| 23 | 4.888 | 8.848 | 7.748 | 17.8 | 4.38 | 12.3 | 3.87 | 8.83 | 3.88 | 8.18 | 10.1 B | 8.748 | 23 |
| 24 | 4.788 | 8.388 | 7.888 | 18.1 | 4.27 | 12.3 | 3.87 | 8.81 | 3.78 | 7.87 | 9.838 | 8.838 | 24 |
| 25 | 4.888 | 8.788 | 7.218 | 18.4 | 4.37 | 11.4 | 3.28 | 8.88 | 3.88 | 7.83 | 9.888 | 8.888 | 25 |
| 26 | 4.888 | 7.788 | 7.118 | 14.8 | 4.33 | 10.2 | 2.88 | 8.38 | 3.27 | 8.88 | 9.888 | 8.778 | 26 |
| 27 | 4.728 | 7.818 | 7.288 | 13.8 | 4.12 | 8.88 | 2.43 | 8.88 | 3.82 | 8.38 | 9.888 | 8.878 | 27 |
| 28 | 4.888 | 7.488 | 7.888 | 13.2 | 3.88 | 8.81 | 2.33 | 8.87 | 3.88 | 8.81 | 9.448 | 8.388 | 28 |
| 29 | 4.848 | | 7.788 | 11.8 | 3.80 | 8.38 | 2.21 | 8.44 | 3.36 | 8.78 | 8.318 | 8.288 | 29 |
| 30 | 4.748 | | 7.848 | 11.8 | 3.82 | 8.82 | 2.18 | 8.88 | 3.43 | 8.87 | 8.188 | 8.288 | 30 |
| 31 | 4.748 | | 7.888 | | 3.88 | | 2.18 | 7.38 | | 8.47 | | 8.288 | 31 |
| TOTAL | 148.88 | 148.43 | 238.83 | 878.32 | 191.18 | 183.38 | 138.13 | 122.88 | 181.73 | 238.38 | 288.88 | 281.81 | TOTAL |
| MEAN | 4.71 | 8.24 | 7.81 | 18.3 | 8.18 | 8.11 | 4.38 | 3.88 | 8.38 | 7.72 | 8.88 | 8.48 | MEAN |
| MAX | 8.13 | 7.78 | 8.12 | 27.8 | 18.8 | 12.3 | 8.37 | 7.38 | 8.37 | 18.7 | 12.1 | 18.8 | MAX |
| MIN | 4.31 | 4.41 | 7.11 | 8.32 | 3.88 | 3.38 | 2.18 | 1.83 | 3.38 | 3.34 | 4.18 | 8.38 | MIN |

### SUMMARY FOR THE YEAR 1989

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 7.67
MAXIMUM DAILY, 27.88 ON APR 8
MINIMUM DAILY, 1.83 ON AUG 18
MAXIMUM INSTANTANEOUS,
27.88 AT 02:33 CST ON APR 8

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 52 38 N
LONG 188 88 18 W
DRAINAGE AREA, 88 188 km²

B - ICE CONDITIONS

REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 13 888 | JUL | 11 288 |
| FEB | 13 888 | AUG | 18 888 |
| MAR | 28 488 | SEP | 14 888 |
| APR | 48 888 | OCT | 28 788 |
| MAY | 18 888 | NOV | 28 888 |
| JUN | 18 888 | DEC | 28 288 |

TOTAL DISCHARGE, 238 888 dam³

## ASSINIBOINE RIVER NEAR HOLLAND - STATION NO. 05MH005

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7.218 | 7.388 | 8.738 | 11.38 | 28.8 | 7.83 | 15.8 | 8.78 | 7.31 | 8.88 | 18.3 | 11.8 B | 1 |
| 2 | 8.888 | 7.438 | 8.838 | 12.78 | 28.8 | 7.88 | 14.1 | 8.48 | 7.24 | 8.47 | 18.38 | 11.8 B | 2 |
| 3 | 8.878 | 7.288 | 8.648 | 38.38 | 24.8 | 7.82 | 13.8 | 8.48 | 7.38 | 8.58 | 14.88 | 11.4 B | 3 |
| 4 | 8.588 | 8.488 | 8.138 | 23.18 | 22.8 | 7.87 | 11.8 | 8.48 | 8.83 | 8.78 | 14.78 | 11.4 B | 4 |
| 5 | 8.388 | 7.878 | 8.488 | 41.38 | 28.8 | 7.84 | 11.2 | 8.28 | 8.84 | 7.28 | 14.88 | 11.3 B | 5 |
| 6 | 8.338 | 8.888 | 8.138 | 138 B | 28.2 | 7.48 | 18.8 | 8.24 | 18.1 | 7.17 | 14.38 | 11.3 B | 6 |
| 7 | 8.838 | 8.828 | 8.888 | 173 B | 18.1 | 7.78 | 8.34 | 8.33 | 18.8 | 7.87 | 14.18 | 11.3 B | 7 |
| 8 | 8.818 | 8.828 | 8.838 | 182 B | 18.7 | 7.71 | 8.48 | 8.28 | 18.8 | 7.33 | 13.88 | 11.3 B | 8 |
| 9 | 8.818 | 8.888 | 8.888 | 118 B | 17.8 | 7.83 | 18.7 | 8.88 | 18.7 | 7.41 | 13.88 | 11.3 B | 9 |
| 10 | 8.138 | 8.818 | 8.888 | 184 B | 18.1 | 7.48 | 8.38 | 4.84 | 18.4 | 7.78 | 13.48 | 11.1 B | 10 |
| 11 | 8.888 | 8.738 | 8.888 | 88.78 | 15.8 | 8.18 | 8.38 | 4.87 | 12.8 | 8.27 | 13.38 | 11.1 B | 11 |
| 12 | 8.388 | 8.478 | 8.888 | 184 B | 15.2 | 12.8 | 8.87 | 4.87 | 12.8 | 18.2 | 13.48 | 11.1 B | 12 |
| 13 | 8.728 | 8.378 | 8.888 | 188 B | 14.7 | 14.3 | 8.13 | 4.88 | 11.8 | 11.3 | 13.88 | 18.8 B | 13 |
| 14 | 8.838 | 8.388 | 8.888 | 184 B | 14.7 | 12.4 | 7.88 | 8.12 | 11.4 | 11.8 | 14.18 | 18.8 B | 14 |
| 15 | 8.438 | 8.838 | 8.718 | 188 B | 14.8 | 8.88 | 7.37 | 8.12 | 18.8 | 12.1 | 13.88 | 11.3 B | 15 |
| 16 | 8.488 | 8.888 | 8.488 | 88.88 | 14.8 | 8.88 | 7.88 | 8.24 | 8.28 | 11.8 | 13.88 | 11.4 B | 16 |
| 17 | 8.328 | 8.358 | 8.828 | 87.88 | 13.8 | 8.27 | 8.88 | 8.38 | 8.38 | 12.8 | 13.38 | 11.4 B | 17 |
| 18 | 8.388 | 8.338 | 8.828 | 74.84 | 13.8 | 8.87 | 8.81 | 8.31 | 7.72 | 12.1 | 13.88 | 11.8 B | 18 |
| 18 | 8.328 | 8.448 | 7.788 | 72.8 | 13.8 | 8.33 | 8.48 | 8.38 | 7.48 | 13.3 | 12.88 | 11.4 B | 18 |
| 28 | 8.438 | 8.388 | 7.888 | 87.8 | 12.8 | 8.18 | 8.41 | 8.82 | 7.81 | 14.8 | 12.38 | 11.8 B | 28 |
| 21 | 8.438 | 8.238 | 8.388 | 84.8 | 12.8 | 7.88 | 8.31 | 8.81 | 7.38 | 18.4 | 11.88 | 11.4 B | 21 |
| 22 | 8.888 | 8.328 | 8.488 | 88.8 | 12.2 | 7.88 | 8.18 | 8.88 | 7.83 | 18.8 | 11.88 | 11.4 B | 22 |
| 23 | 8.838 | 8.838 | 8.888 | 88.2 | 11.8 | 8.87 | 8.88 | 8.78 | 8.87 | 18.8 | 11.88 | 11.3 B | 23 |
| 24 | 8.318 | 8.888 | 8.388 | 88.8 | 18.8 | 11.3 | 8.88 | 7.18 | 7.87 | 18.8 | 11.88 | 11.3 B | 24 |
| 28 | 8.388 | 7.388 | 8.388 | 81.4 | 18.8 | 14.7 | 8.83 | 7.88 | 8.78 | 18.1 | 11.88 | 11.2 B | 28 |
| 26 | 8.788 | 7.748 | 8.818 | 48.2 | 8.78 | 18.8 | 8.88 | 8.82 | 8.88 | 14.3 | 11.88 | 18.8 B | 28 |
| 27 | 8.888 | 8.248 | 18.8 B | 48.7 | 8.48 | 18.2 | 8.88 | 8.83 | 8.88 | 13.7 | 11.88 | 18.8 B | 27 |
| 28 | 8.578 | 8.848 | 11.4 B | 38.8 | 8.17 | 18.8 | 8.84 | 8.88 | 8.88 | 13.2 | 11.88 | 18.3 B | 28 |
| 28 | 7.388 | | 12.8 B | 33.8 | 8.88 | 18.3 | 8.88 | 7.88 | 8.83 | 13.3 | 11.88 | 18.3 B | 28 |
| 38 | 7.888 | | 13.8 B | 31.8 | 8.83 | 18.3 | 8.88 | 7.34 | 8.88 | 14.8 | 11.88 | 18.8 B | 38 |
| 31 | 7.838 | | 11.8 B | | 8.31 | | 8.73 | 7.14 | | 18.8 | | 8.818 | 31 |
| TOTAL | 284.88 | 188.88 | 287.84 | 2 187.4 | 488.88 | 388.73 | 284.18 | 182.48 | 288.84 | 388.48 | 384.3 | 344.71 | TOTAL |
| MEAN | 8.88 | 8.81 | 8.88 | 73.2 | 15.1 | 18.2 | 8.28 | 8.88 | 8.83 | 11.3 | 13.1 | 11.1 | MEAN |
| MAX | 8.43 | 8.84 | 13.8 | 173 | 28.8 | 14.3 | 15.8 | 7.38 | 13.8 | 18.8 | 18.3 | 11.4 | MAX |
| MIN | 8.88 | 8.83 | 7.78 | 11.2 | 8.31 | 7.48 | 8.73 | 4.87 | 8.82 | 8.47 | 11.8 | 8.81 | MIN |

### SUMMARY FOR THE YEAR 1989

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 14.8
MAXIMUM DAILY, 1738 ON APR 7
MINIMUM DAILY, 4.87 ON AUG 11
MAXIMUM INSTANTANEOUS,
1778 AT 18:44 CST ON APR 7

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 41 84 N
LONG 98 32 88 W
DRAINAGE AREA, 183 888 km²

A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 17 788 | JUL | 22 888 |
| FEB | 18 888 | AUG | 18 888 |
| MAR | 28 788 | SEP | 32 488 |
| APR | 188 888 | OCT | 38 388 |
| MAY | 48 388 | NOV | 34 188 |
| JUN | 28 488 | DEC | 28 888 |

TOTAL DISCHARGE, 471 888 dam³

## ASSINIBOINE RIVER NEAR MINIOTA - STATION NO. 05MH004

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.340 | 6.210 | 6.210 | 14.3 B | 6.36 | 2.67E | 2.47E | 2.30 | 6.98 | 6.16 | 6.28 | 7.670 | 1 |
| 2 | 6.660 | 6.150 | 6.200 | 16.0 B | 6.13 | 2.60E | 2.43E | 2.23 | 6.06 | 6.36 | 6.04 | 7.380 | 2 |
| 3 | 6.750 | 6.080 | 6.830 | 18.6 B | 6.00 | 2.60E | 2.18E | 2.60 | 6.30 | 7.09 | 6.020 | 7.740 | 3 |
| 4 | 6.730 | 3.700 | 6.960 | 26.2 B | 6.80 | 2.61E | 2.06E | 2.37 | 3.76 | 7.64 | 6.260 | 8.370 | 4 |
| 5 | 6.700 | 3.630 | 6.720 | 28.6 B | 6.81 | 2.66E | 2.12E | 2.06 | 3.47 | 7.81 | 10.7 B | 6.620 | 5 |
| 6 | 6.620 | 6.600 | 7.150 | 26.1 B | 6.46 | 2.66E | 2.24E | 1.98 | 3.46 | 6.16 | 12.6 B | 6.720 | 6 |
| 7 | 6.660 | 6.750 | 6.290 | 26.6 B | 6.36 | 2.66E | 2.19E | 1.96 | 3.46 | 6.26 | 12.0 B | 6.110 | 7 |
| 8 | 6.640 | 6.780 | 6.480 | 24.3 B | 6.20 | 2.61E | 2.10E | 1.89 | 3.46 | 6.19 | 11.2 B | 6.780 | 8 |
| 9 | 6.620 | 6.770 | 6.660 | 23.1 B | 6.17 | 2.60E | 2.12E | 2.43 | 3.42 | 6.07 | 10.7 B | 6.660 | 9 |
| 10 | 6.620 | 6.740 | 7.160 | 21.6 B | 6.17 | 2.67E | 1.88A | 3.17 | 3.43 | 6.00 | 10.1 B | 6.330 | 10 |
| 11 | 6.340 | 6.660 | 7.370 | 18.6 B | 3.94 | 3.20E | 1.67 | 3.38 | 3.46 | 6.46 | 9.410 | 6.080 | 11 |
| 12 | 6.080 | 6.660 | 7.870 | 16.3 B | 3.78 | 3.10E | 2.38 | 3.37 | 3.46 | 10.1 | 7.630 | 6.470 | 12 |
| 13 | 6.310 | 6.420 | 8.360 | 17.7 B | 3.63 | 2.83E | 2.28 | 3.38 | 3.46 | 10.3 | 7.800 | 6.640 | 13 |
| 14 | 6.310 | 6.520 | 8.600 | 17.6 B | 3.46 | 3.10E | 2.18 | 3.38 | 3.37 | 10.3 | 6.530 | 6.380 | 14 |
| 15 | 6.300 | 6.410 | 8.090 | 16.4 B | 3.38 | 3.03E | 2.66 | 3.06 | 3.37 | 10.0 | 7.730 | 6.640 | 15 |
| 16 | 6.370 | 6.500 | 9.100 | 16.1 B | 3.42 | 4.03E | 3.12 | 4.67 | 3.38 | 6.78 | 10.0 B | 6.660 | 16 |
| 17 | 6.320 | 7.100 | 9.150 | 15.6 B | 3.61 | 4.46E | 2.86 | 4.60 | 3.32 | 6.06 | 9.350 | 6.020 | 17 |
| 18 | 6.270 | 7.700 | 8.500 | 12.8 B | 3.46 | 4.20E | 2.64 | 4.67 | 3.32 | 7.66 | 9.230 | 6.740 | 18 |
| 19 | 6.200 | 8.460 | 8.080 | 10.6 B | 3.36 | 3.86E | 2.46 | 4.63 | 3.38 | 7.30 | 8.670 | 6.760 | 19 |
| 20 | 6.070 | 8.760 | 7.760 | 9.73 | 3.10 | 3.80E | 2.21 | 4.77 | 3.31 | 6.86 | 7.630 | 6.700 | 20 |
| 21 | 6.060 | 6.800 | 7.810 | 9.71 | 2.98 | 3.61E | 1.86 | 4.84 | 3.38 | 7.27 | 6.530 | 6.660 | 21 |
| 22 | 6.750 | 6.060 | 6.170 | 6.86 | 2.84 | 3.15E | 1.77 | 4.66 | 3.43 | 6.40 | 6.180 | 6.020 | 22 |
| 23 | 6.710 | 6.340 | 6.280 | 6.37 | 3.03A | 2.78E | 1.78 | 4.64 | 3.36 | 6.67 | 6.040 | 6.460 | 23 |
| 24 | 6.660 | 6.340 | 6.280 | 6.09 | 3.14E | 2.61E | 1.86 | 6.26 | 3.37 | 6.84 | 10.6 B | 6.460 | 24 |
| 25 | 6.620 | 6.180 | 6.340 | 7.66 | 3.24E | 2.72E | 1.86 | 6.26 | 3.36 | 6.89 | 10.6 B | 6.640 | 25 |
| 26 | 6.380 | 6.210 | 6.900 | 7.96 | 3.33E | 2.66E | 1.86 | 6.26 | 3.31 | 6.87 | 6.600 | 6.020 | 26 |
| 27 | 6.260 | 6.340 | 11.0 B | 7.71 | 3.41E | 2.72E | 1.86 | 6.31 | 3.31 | 6.14 | 6.030 | 6.110 | 27 |
| 28 | 6.010 | 6.260 | 13.2 B | 6.86 | 3.50E | 2.33E | 1.87 | 6.26 | 3.40 | 6.86 | 6.260 | 6.270 | 28 |
| 29 | 6.040 | | 13.0 B | 6.32 | 3.63A | 2.26E | 1.87 | 6.32 | 3.46 | 6.61 | 7.660 | 6.490 | 29 |
| 30 | 6.120 | | 12.8 B | 6.73 | 3.08E | 2.42E | 2.10 | 6.64 | 3.44 | 6.80 | 7.630 | 6.660 | 30 |
| 31 | 6.160 | | 12.6 B | | 2.86E | | 2.36 | 6.82 | | 6.73 | | 6.800 | 31 |
| TOTAL | 188.20 | 182.33 | 278.86 | 460.87 | 116.37 | 80.86 | 66.37 | 121.70 | 107.36 | 268.70 | 274.68 | 274.63 | TOTAL |
| MEAN | 6.11 | 6.51 | 8.93 | 15.4 | 3.76 | 3.03 | 2.31 | 3.93 | 3.58 | 6.36 | 6.16 | 6.87 | MEAN |
| MAX | 6.94 | 8.34 | 13.2 | 26.6 | 6.36 | 4.63 | 3.12 | 6.82 | 6.98 | 10.3 | 12.6 | 6.86 | MAX |
| MIN | 6.01 | 3.70 | 6.26 | 6.73 | 2.86 | 2.26 | 1.77 | 1.96 | 3.26 | 4.14 | 6.82 | 7.26 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 6.84
MAXIMUM DAILY, 26.6B ON APR 6
MINIMUM DAILY, 1.77 ON JUL 22
MAXIMUM INSTANTANEOUS,
26.4B AT 20:33 CST ON APR 6

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 06 39 N
LONG 101 02 06 W
DRAINAGE AREA, 78 100 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 16 400 | JUL | 5 810 |
| FEB | 15 800 | AUG | 10 500 |
| MAR | 23 900 | SEP | 9 230 |
| APR | 39 800 | OCT | 22 400 |
| MAY | 10 100 | NOV | 23 700 |
| JUN | 7 880 | DEC | 23 700 |

TOTAL DISCHARGE, 209 000 dam³

## ASSINIBOINE RIVER NEAR RUSSELL - STATION NO. 05MH001

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.440 | 6.750 | 6.110 | 9.350 | 1.30 | 1.12 | 1.05 | 1.80 | 2.85 | 2.61 | 3.07 | 3.480 | 1 |
| 2 | 6.000 | 6.030 | 6.310 | 8.750 | 1.28 | 1.14 | 1.07 | 1.56 | 2.83 | 2.63 | 2.86 | 3.080 | 2 |
| 3 | 6.020 | 6.760 | 6.110 | 7.480 | 1.29 | 1.13 | 1.08 | 1.56 | 2.89 | 2.49 | 3.06 | 4.030 | 3 |
| 4 | 6.480 | 6.000 | 6.430 | 7.070 | 1.31 | 1.10 | 1.02 | 1.84 | 3.07 | 2.52 | 4.03 | 4.070 | 4 |
| 5 | 6.460 | 6.430 | 6.390 | 6.930 | 1.30 | 1.14 | 1.04 | 2.27 | 2.98 | 2.64 | 3.03 | 4.060 | 5 |
| 6 | 6.400 | 6.430 | 6.670 | 6.520 | 1.28 | 1.18 | 1.03 | 2.41 | 3.04 | 2.61 | 2.84 | 4.710 | 6 |
| 7 | 6.300 | 6.340 | 6.660 | 6.610 | 1.32 | 1.27 | 1.01 | 2.43 | 3.03 | 2.48 | 2.87 | 4.810 | 7 |
| 8 | 6.006 | 6.010 | 6.470 | 6.430 | 1.32 | 1.27 | 1.08 | 2.43 | 3.06 | 2.60 | 2.86 | 5.200 | 8 |
| 9 | 6.070 | 6.730 | 6.080 | 6.440 | 1.32 | 1.18 | 1.13 | 2.46 | 3.01 | 2.63 | 2.87 | 5.180 | 9 |
| 10 | 6.020 | 6.700 | 6.070 | 6.810 | 1.28 | 1.16 | 1.08 | 2.47 | 2.98 | 2.49 | 2.83 | 5.230 | 10 |
| 11 | 6.040 | 6.180 | 6.060 | 1.640 | 1.27 | 1.28 | 1.11 | 2.97 | 2.98 | 2.63 | 2.82 | 4.980 | 11 |
| 12 | 6.180 | 7.600 | 6.660 | 1.950 | 1.26 | 1.24 | 1.12 | 4.04 | 2.97 | 2.48 | 2.420 | 4.670 | 12 |
| 13 | 6.060 | 7.600 | 6.300 | 1.720 | 1.28 | 1.41 | 1.08 | 4.18 | 2.98 | 2.16 | 2.660 | 4.960 | 13 |
| 14 | 6.070 | 7.980 | 6.180 | 1.660 | 1.23 | 1.26 | 1.06 | 4.24 | 2.95 | 1.24 | 2.410 | 4.670 | 14 |
| 15 | 6.060 | 8.460 | 6.690 | 1.480 | 1.20 | 1.18 | 1.04 | 4.30 | 2.97 | 1.03 | 2.470 | 4.970 | 15 |
| 16 | 4.980 | 6.810 | 6.480 | 1.41 | 1.16 | 1.14 | 1.02 | 4.36 | 2.89 | 0.856 | 2.360 | 4.960 | 16 |
| 17 | 4.880 | 6.460 | 6.660 | 1.31 | 1.20 | 1.16 | 1.01 | 4.57 | 3.01 | 0.825 | 2.970 | 4.970 | 17 |
| 18 | 6.000 | 6.670 | 6.980 | 1.30 | 1.17 | 1.13 | 1.16 | 4.77 | 2.89 | 0.872 | 3.380 | 4.860 | 18 |
| 19 | 6.040 | 6.740 | 6.170 | 1.32 | 1.17 | 1.08 | 1.86 | 4.86 | 3.02 | 0.878 | 3.060 | 4.860 | 19 |
| 20 | 6.060 | 6.710 | 6.730 | 1.32 | 1.16 | 1.16 | 1.84 | 4.80 | 2.96 | 0.886 | 3.030 | 4.870 | 20 |
| 21 | 6.060 | 6.870 | 6.810 | 1.36 | 1.16 | 1.16 | 1.81 | 4.84 | 2.84 | 0.871 | 2.370 | 4.960 | 21 |
| 22 | 6.000 | 6.620 | 6.270 | 1.30 | 1.12 | 1.13 | 1.81 | 5.02 | 2.74 | 0.883 | 2.360 | 4.970 | 22 |
| 23 | 4.920 | 6.740 | 6.270 | 1.30 | 1.11 | 1.11 | 1.66 | 5.04 | 2.84 | 0.864 | 2.630 | 5.000 | 23 |
| 24 | 4.880 | 6.830 | 6.410 | 1.36 | 1.14 | 1.10 | 1.84 | 6.11 | 2.76 | 0.831 | 2.460 | 5.040 | 24 |
| 25 | 4.880 | 6.030 | 6.660 | 1.33 | 1.27 | 1.08 | 1.86 | 6.26 | 2.84 | 0.836 | 2.440 | 5.080 | 25 |
| 26 | 6.100 | 6.860 | 7.080 | 1.30 | 1.20 | 1.17 | 1.86 | 6.16 | 2.86 | 0.836 | 2.340 | 4.980 | 26 |
| 27 | 6.080 | 6.830 | 6.930 | 1.28 | 1.17 | 1.13 | 1.83 | 6.06 | 2.83 | 0.863 | 2.380 | 5.020 | 27 |
| 28 | 6.040 | 6.690 | 6.410 | 1.26 | 1.16 | 1.10 | 1.86 | 6.06 | 2.83 | 1.82 | 2.380 | 5.230 | 28 |
| 29 | 6.040 | | 6.660 | 1.26 | 1.12 | 1.11 | 1.86 | 6.10 | 2.84 | 2.86 | 2.610 | 4.840 | 29 |
| 30 | 6.060 | | 6.280 | 1.26 | 1.12 | 1.08 | 1.87 | 6.26 | 2.86 | 3.06 | 3.440 | 5.060 | 30 |
| 31 | 4.200 | | 6.630 | | 1.11 | | 1.87 | 2.81 | | 3.08 | | 5.200 | 31 |
| TOTAL | 187.37 | 203.66 | 187.36 | 80.67 | 37.74 | 36.29 | 38.33 | 116.47 | 88.03 | 55.841 | 81.62 | 151.70 | TOTAL |
| MEAN | 6.06 | 7.26 | 6.37 | 2.69 | 1.22 | 1.18 | 1.27 | 3.76 | 2.87 | 1.80 | 2.72 | 4.86 | MEAN |
| MAX | 6.66 | 8.03 | 6.83 | 9.36 | 1.32 | 1.84 | 1.86 | 6.86 | 3.07 | 3.06 | 4.03 | 6.33 | MAX |
| MIN | 4.20 | 4.70 | 6.11 | 1.26 | 1.11 | 1.08 | 1.01 | 1.66 | 2.84 | 0.836 | 2.06 | 3.46 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 3.41
MAXIMUM DAILY, 9.36B ON APR 1
MINIMUM DAILY, 0.836 ON OCT 26
MAXIMUM INSTANTANEOUS,
12.6B AT 21:30 CST ON APR 1

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 48 36 N
LONG 101 26 10 W
DRAINAGE AREA, 10 300 km²
B - ICE CONDITIONS
REGULATED SINCE 1988

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 13 800 | JUL | 3 400 |
| FEB | 17 800 | AUG | 10 100 |
| MAR | 17 100 | SEP | 7 630 |
| APR | 8 850 | OCT | 4 830 |
| MAY | 3 330 | NOV | 7 060 |
| JUN | 3 060 | DEC | 13 100 |

TOTAL DISCHARGE, 107 000 dam³

## ATHAPAPUSKOW LAKE AT CRANBERRY PORTAGE - STATION NO. 05KG005

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 291.668 | 291.671 | 291.678 | 291.680 | 291.683 | 291.711 | 291.752 | 291.727 | 291.715 | 291.681 | 291.668 | 291.681 | 1 |
| 2 | 291.667 | 291.674 | 291.677 | 291.681 | 291.685 | 291.712 | 291.748 | 291.718 | 291.711 | 291.684 | 291.681 | 291.658 | 2 |
| 3 | 291.671 | 291.673 | 291.676 | 291.678 | 291.682 | 291.708 | 291.745 | 291.728 | 291.700 | 291.682 | 291.655 | 291.662 | 3 |
| 4 | 291.673 | 291.675 | 291.681 | 291.680 | 291.685 | 291.707 | 291.740 | 291.718 | 291.707 | 291.684 | 291.655 | 291.664 | 4 |
| 5 | 291.674 | 291.676 | 291.678 | 291.678 | 291.683 | 291.706 | 291.760 | 291.725 | 291.712 | 291.670 | 291.655 | 291.661 | 5 |
| 6 | 291.672 | 291.680 | 291.670 | 291.678 | 291.683 | 291.684 | 291.765 | 291.725 | 291.688 | 291.683 | 291.652 | 291.658 | 6 |
| 7 | 291.673 | 291.678 | 291.680 | 291.678 | 291.688 | 291.688 | 291.764 | 291.725 | 291.723 | 291.658 | 291.661 | 291.664 | 7 |
| 8 | 291.680 | 291.674 | 291.661 | 291.678 | 291.686 | 291.686 | 291.762 | 291.723 | 291.724 | 291.658 | 291.648 | 291.656 | 8 |
| 9 | 291.688 | 291.676 | 291.661 | 291.675 | 291.686 | 291.686 | 291.767 | 291.720 | 291.737 | 291.661 | 291.648 | 291.658 | 9 |
| 10 | 291.686 | 291.680 | 291.662 | 291.673 | 291.688 | 291.684 | 291.762 | 291.719 | 291.738 | 291.659 | 291.658 | 291.658 | 10 |
| 11 | 291.670 | 291.661 | 291.680 | 291.672 | 291.686 | 291.688 | 291.768 | 291.716 | 291.728 | 291.688 | 291.661 | 291.655 | 11 |
| 12 | 291.671 | 291.676 | 291.686 | 291.670 | 291.681 | 291.686 | 291.763 | 291.703 | 291.731 | 291.660 | 291.651 | 291.656 | 12 |
| 13 | 291.672 | 291.678 | 291.688 | 291.676 | 291.688 | 291.690 | 291.763 | 291.700 | 291.728 | 291.652 | 291.646 | 291.656 | 13 |
| 14 | 291.673 | 291.676 | 291.680 | 291.672 | 291.693 | 291.686 | 291.763 | 291.703 | 291.723 | 291.656 | 291.643 | 291.657 | 14 |
| 15 | 291.667 | 291.677 | 291.678 | 291.672 | 291.696 | 291.685 | 291.762 | 291.701 | 291.724 | 291.656 | 291.644 | 291.660 | 15 |
| 16 | 291.668 | 291.678 | 291.680 | 291.670 | 291.683 | 291.686 | 291.758 | 291.686 | 291.710 | 291.663 | 291.634 | 291.663 | 16 |
| 17 | 291.660 | 291.678 | 291.678 | 291.667 | 291.700 | 291.692 | 291.758 | 291.688 | 291.718 | 291.664 | 291.638 | 291.662 | 17 |
| 18 | 291.666 | 291.678 | 291.677 | 291.670 | 291.703 | 291.690 | 291.760 | 291.688 | 291.715 | 291.641 | 291.634 | 291.662 | 18 |
| 19 | 291.668 | 291.681 | 291.678 | 291.666 | 291.703 | 291.690 | 291.763 | 291.680 | 291.708 | 291.648 | 291.645 | 291.661E | 19 |
| 20 | 291.668 | 291.678 | 291.677 | 291.683 | 291.717 | 291.697 | 291.761 | 291.678 | 291.707 | 291.641 | 291.648 | 291.665E | 20 |
| 21 | 291.674 | 291.678 | 291.674 | 291.668 | 291.723 | 291.685 | 291.754 | 291.673 | 291.703 | 291.645 | 291.644 | 291.668E | 21 |
| 22 | 291.673 | 291.677 | 291.675 | 291.672 | 291.724 | 291.686 | 291.752 | 291.682 | 291.703 | 291.660 | 291.647 | 291.666 | 22 |
| 23 | 291.671 | 291.678 | 291.678 | 291.678 | 291.720 | 291.688 | 291.754 | 291.658 | 291.691 | 291.648 | 291.643 | 291.674 | 23 |
| 24 | 291.670 | 291.681 | 291.677 | 291.683 | 291.711 | 291.682 | 291.744 | 291.684 | 291.700 | 291.645 | 291.644 | 291.683 | 24 |
| 25 | 291.668 | 291.683 | 291.671 | 291.682 | 291.723 | 291.684 | 291.752 | 291.699 | 291.692 | 291.645 | 291.650 | 291.682 | 25 |
| 26 | 291.673 | 291.676 | 291.673 | 291.683 | 291.717 | 291.717 | 291.742 | 291.728 | 291.680 | 291.644 | 291.651 | 291.683 | 26 |
| 27 | 291.676 | 291.684 | 291.673 | 291.686 | 291.720 | 291.737 | 291.734 | 291.733 | 291.684 | 291.648 | 291.648 | 291.682 | 27 |
| 28 | 291.676 | 291.679 | 291.673 | 291.686 | 291.718 | 291.730 | 291.727 | 291.724 | 291.683 | 291.665 | 291.645 | 291.683 | 28 |
| 29 | 291.676 | | 291.678 | 291.683 | 291.715 | 291.748 | 291.728 | 291.724 | 291.674 | 291.662 | 291.658 | 291.680 | 29 |
| 30 | 291.676 | | 291.676 | 291.683 | 291.713 | 291.748 | 291.730 | 291.719 | 291.668 | 291.658 | 291.652 | 291.687 | 30 |
| 31 | 291.673 | | 291.676 | | 291.714 | | 291.724 | 291.718 | | 291.658 | | 291.682 | 31 |
| | 291.672 | | 291.677 | | | | | | | | | | |
| MEAN | 291.671 | 291.678 | 291.676 | 291.676 | 291.701 | 291.701 | 291.754 | 291.706 | 291.707 | 291.665 | 291.649 | 291.666 | MEAN |
| MAX | 291.676 | 291.684 | 291.686 | 291.686 | 291.724 | 291.748 | 291.767 | 291.733 | 291.737 | 291.670 | 291.661 | 291.687 | MAX |
| MIN | 291.660 | 291.671 | 291.670 | 291.663 | 291.682 | 291.682 | 291.724 | 291.682 | 291.668 | 291.641 | 291.634 | 291.664 | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MEAN, 291.687
MAXIMUM DAILY, 291.767 ON JUL 9
MINIMUM DAILY, 291.634 ON NOV 16
MAXIMUM INSTANTANEOUS,
291.778 AT 11:15 CST ON JUL 28

TYPE OF GAUGE - RECORDING
LOCATION - LAT 54 38 00 N
LONG 101 23 00 W

E - ESTIMATED

REGULATED

DRAINAGE AREA,
2 000 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1974 ADJ.)

## BACK LAKE NEAR OXFORD HOUSE - STATION NO. 04AA003

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 188.861 | 188.862 | 188.856 | 188.861 | 188.901 | --- | 188.856 | 188.770 | 188.784 | 188.808 | 188.878 | --- | 1 |
| 2 | 188.862 | 188.861 | 188.862 | 188.858 | 188.882 | --- | 188.863 | 188.788 | 188.787 | 188.803 | 188.878 | --- | 2 |
| 3 | 188.868 | 188.864 | 188.856 | 188.853 | 188.887 | --- | 188.856 | 188.791 | 188.780 | 188.808 | 188.872 | --- | 3 |
| 4 | 188.878 | 188.865 | 188.859 | 188.852 | 188.888 | --- | 188.861 | 188.738 | 188.788 | 188.825 | 188.885 | --- | 4 |
| 5 | 188.878 | 188.863 | 188.864 | 188.858 | 188.884 | --- | 188.854 | 188.728 | 188.784 | 188.830 | 188.873 | --- | 5 |
| 6 | 188.878 | 188.867 | 188.865 | 188.864 | 188.894 | --- | 188.847 | 188.724 | 188.788 | 188.840 | 188.872 | --- | 6 |
| 7 | 188.877 | 188.860 | 188.861 | 188.836 | 188.887 | 188.870A | 188.836 | 188.723 | 188.787 | 188.830 | 188.878 | --- | 7 |
| 8 | 188.877 | 188.863 | 188.858 | 188.834 | 188.881 | 188.868 | 188.841 | 188.737 | 188.785 | 188.831 | 188.878 | --- | 8 |
| 9 | 188.880 | 188.868 | 188.852 | 188.832 | 188.886 | 188.871 | 188.838 | 188.733 | 188.782 | 188.838 | 188.878 | --- | 9 |
| 10 | 188.884 | 188.861 | 188.864 | 188.832 | 188.895 | 188.857 | 188.822 | 188.726 | 188.778 | 188.838 | 188.878 | --- | 10 |
| 11 | 188.868 | 188.865 | 188.860 | 188.827 | 188.901 | 188.852 | 188.813 | 188.733 | 188.781 | 188.828 | 188.881 | --- | 11 |
| 12 | 188.897 | 188.863 | 188.861 | 188.820 | 188.898 | 188.841 | 188.821 | 188.732 | 188.784 | 188.843 | 188.883 | --- | 12 |
| 13 | 188.903 | 188.868 | 188.868 | 188.828 | 188.908 | 188.880 | 188.817 | 188.712 | 188.827 | 188.844 | 188.880 | --- | 13 |
| 14 | 188.908 | 188.867 | 188.864 | 188.834 | 188.905A | 188.881 | 188.806 | 188.680 | 188.831 | 188.837 | 188.880 | --- | 14 |
| 15 | 188.911 | 188.868 | 188.863 | 188.838 | --- | 188.894 | 188.802 | 188.693 | 188.824 | 188.837 | 188.882 | --- | 15 |
| 16 | 188.911 | 188.861 | 188.868 | 188.818 | --- | 188.893 | 188.887 | 188.691 | 188.828 | 188.842 | 188.884A | --- | 16 |
| 17 | 188.911 | 188.861 | 188.868 | 188.817 | --- | 187.000 | 188.891 | 188.684 | 188.810 | 188.841 | --- | --- | 17 |
| 18 | 188.924 | 188.864 | 188.862 | 188.822 | --- | 188.888 | 188.880 | 188.684 | 188.813 | 188.844 | --- | --- | 18 |
| 19 | 188.927 | 188.860 | 188.858 | 188.831 | --- | 188.887 | 188.888 | 188.671 | 188.818 | 188.871 | --- | --- | 19 |
| 20 | 188.922 | 188.861 | 188.858 | 188.813 | --- | 188.882 | 188.894 | 188.684 | 188.818 | 188.888 | --- | --- | 20 |
| 21 | 188.924 | 188.868 | 188.858 | 188.813 | --- | 188.881 | 188.874 | 188.885 | 188.824 | 188.845 | --- | --- | 21 |
| 22 | 188.923 | 188.860 | 188.847 | 188.812 | --- | 188.878 | 188.858 | 188.884 | 188.830 | 188.850 | --- | --- | 22 |
| 23 | 188.928 | 188.854 | 188.850 | 188.811 | --- | 188.878 | 188.854 | 188.880 | 188.832 | 188.854 | --- | --- | 23 |
| 24 | 188.932 | 188.858 | 188.850 | 188.826 | --- | 188.874 | 188.849 | 188.873 | 188.848 | 188.852 | --- | --- | 24 |
| 25 | 188.932 | 188.863 | 188.849 | 188.821 | --- | 188.872 | 188.837 | 188.887 | 188.888 | 188.848 | --- | --- | 25 |
| 26 | 188.932 | 188.859 | 188.848 | 188.818 | --- | 188.868 | 188.824 | 188.787 | 188.841 | 188.847 | --- | --- | 26 |
| 27 | 188.934 | 188.858 | 188.849 | 188.808 | --- | 188.843 | 188.787 | 188.788 | 188.838 | 188.820 | --- | --- | 27 |
| 28 | 188.942 | 188.858 | 188.864 | 188.805 | --- | 188.858 | 188.788 | 188.788 | 188.859 | 188.808 | --- | --- | 28 |
| 29 | 188.948 | | 188.860 | 188.804 | --- | 188.868 | 188.788 | 188.773 | 188.853 | 188.877 | --- | --- | 29 |
| 30 | 188.948 | | 188.868 | 188.801 | --- | 188.868 | 188.783 | 188.777 | 188.838 | 188.888 | --- | --- | 30 |
| 31 | 188.947 | | 188.858 | | --- | | 188.778 | 188.784 | | 188.880 | | --- | 31 |
| MEAN | 188.907 | 188.860 | 188.858 | 188.827 | --- | --- | 188.858 | 188.720 | 188.814 | 188.841 | --- | --- | MEAN |
| MAX | 188.947 | 188.868 | 188.868 | 188.858 | --- | --- | 188.888 | 188.784 | 188.859 | 188.888 | --- | --- | MAX |
| MIN | 188.861 | 188.841 | 188.847 | 188.801 | --- | --- | 188.778 | 188.684 | 188.778 | 188.803 | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MINIMUM DAILY, 188.684 ON AUG 20

TYPE OF GAUGE - RECORDING
LOCATION - LAT 54 59 30 N
LONG 98 14 50 W

A - MANUAL GAUGE

NATURAL FLOW

DRAINAGE AREA,
9 010 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM
APPLY -188.887 m ADJUSTMENT TO CONVERT TO ASSUMED DATUM

## BADGER CREEK NEAR CARTWRIGHT - STATION NO. 05DA007

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.0 | 0.0 | 0.0 B | 0.5408 | 0.041 | 0.004 | 0 | 0 | 0 | 0 | 0 | 0.0 | 1 |
| 2 | 0.0 | 0.0 | 0.0 B | 1.82 B | 0.040 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0.0 | 2 |
| 3 | 0.0 | 0.0 | 0.0 B | 9.88 B | 0.030 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0.0 | 3 |
| 4 | 0.0 | 0.0 | 0.0 B | 11.6 B | 0.026 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0.0 | 4 |
| 5 | 0.0 | 0.0 | 0.0 B | 12.3 B | 0.023 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0.0 | 5 |
| 6 | 0.0 | 0.0 | 0.0 B | 11.9 B | 0.023 | 0.002 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 6 |
| 7 | 0.0 | 0.0 | 0.0 B | 8.20 B | 0.018 | 0.004 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 7 |
| 8 | 0.0 | 0.0 | 0.0 B | 3.13 B | 0.017 | 0.003 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 8 |
| 9 | 0.0 | 0.0 | 0.0 B | 2.82 B | 0.017 | 0.002 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 9 |
| 10 | 0.0 | 0.0 | 0.0 B | 3.13 B | 0.018 | 0.002 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 10 |
| 11 | 0.0 | 0.0 | 0.0 B | 2.41 | 0.013 | 0.003 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 11 |
| 12 | 0.0 | 0.0 | 0.0 B | 2.44 | 0.013 | 0.001 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 12 |
| 13 | 0.0 | 0.0 | 0.0 B | 2.14 | 0.018 | 0.019 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 13 |
| 14 | 0.0 | 0.0 | 0.0 B | 2.02 | 0.010 | 0.012 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 14 |
| 15 | 0.0 | 0.0 | 0.0 B | 1.87 | 0.002 | 0.007 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 15 |
| 16 | 0.0 | 0.0 | 0.0 B | 1.60 | 0.004 | 0.003 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 16 |
| 17 | 0.0 | 0.0 | 0.0 B | 1.01 | 0.007 | 0.004 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 17 |
| 18 | 0.0 | 0.0 | 0.0 B | 0.784 | 0.017 | 0.003 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 18 |
| 19 | 0.0 | 0.0 | 0.0 B | 0.591 | 0.028 | 0.004 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 19 |
| 20 | 0.0 | 0.0 | 0.0 B | 0.392 | 0.018 | 0.001 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 20 |
| 21 | 0.0 | 0.0 | 0.0 B | 0.288 | 0.007 | 0.002 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 21 |
| 22 | 0.0 | 0.0 | 0.0 B | 0.245 | 0.016 | 0.004 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 22 |
| 23 | 0.0 | 0.0 | 0.0 B | 0.249 | 0.030 | 0.004 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 23 |
| 24 | 0.0 | 0.0 | 0.0 B | 0.228 | 0.015 | 0.004 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 24 |
| 25 | 0.0 | 0.0 | 0.0 B | 0.188 | 0.018 | 0.004 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 25 |
| 26 | 0.0 | 0.0 | 0.0 B | 0.147 | 0.018 | 0.003 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 26 |
| 27 | 0.0 | 0.0 | 0.0108 | 0.108 | 0.010 | 0.002 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 27 |
| 28 | 0.0 | 0.0 | 0.0088 | 0.081 | 0.002 | 0.002 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 28 |
| 29 | 0.0 | | 0.0068 | 0.086 | 0.003 | 0.057 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 29 |
| 30 | 0.0 | | 0.0048 | 0.082 | 0.005 | 0.003 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 30 |
| 31 | 0.0 | | 0.0038 | | 0.004 | | 0 | 0 | | 0 | | 0.0 | 31 |
| TOTAL | 0 | 0 | 0.031 | 79.985 | 0.486 | 0.119 | 0 | 0 | 0 | 0 | 0 | 0 | TOTAL |
| MEAN | 0 | 0 | 0.001 | 2.65 | 0.018 | 0.004 | 0 | 0 | 0 | 0 | 0 | 0 | MEAN |
| MAX | 0 | 0 | 0.010 | 12.3 | 0.041 | 0.019 | 0 | 0 | 0 | 0 | 0 | 0 | MAX |
| MIN | 0 | 0 | 0 | 0.082 | 0.002 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.220
MAXIMUM DAILY, 12.30 ON APR 5
MINIMUM DAILY, 0.0 ON JAN 1

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 48 08 16 N
LONG 59 19 32 W
DRAINAGE AREA, 1 830 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 0 | JUL | 0 |
| FEB | 0 | AUG | 0 |
| MAR | 2.68 | SEP | 0 |
| APR | 6 870 | OCT | 0 |
| MAY | 42.0 | NOV | 0 |
| JUN | 10.3 | DEC | 0 |

TOTAL DISCHARGE, 6 930 dam³

## BALD HILL RESERVOIR NEAR MCCREARY - STATION NO. 05LJ803

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 708.974A | 708.858 | --- | 708.890 | 708.858 | 708.818 | 708.847 | --- | 1 |
| 2 | --- | --- | --- | --- | 708.9718 | 708.858 | --- | 708.706 | 708.847 | 708.816 | 708.843 | --- | 2 |
| 3 | --- | --- | --- | --- | 708.8688 | 708.853 | --- | 708.678 | 708.853 | 708.819 | 708.840 | --- | 3 |
| 4 | --- | --- | --- | --- | 708.8678 | 708.847A | --- | 708.870 | 708.858 | 708.822 | 708.837 | --- | 4 |
| 5 | --- | --- | --- | --- | 708.8648 | --- | --- | 708.904 | 708.980 | 708.928 | 708.837 | --- | 5 |
| 6 | --- | --- | --- | --- | 708.883 | --- | --- | 708.901 | 709.017 | 708.935 | 708.840A | --- | 6 |
| 7 | --- | --- | --- | --- | 708.888 | --- | --- | 708.784 | 708.944 | 708.819 | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 708.883 | --- | --- | 708.718 | 708.923 | 708.819 | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 708.853 | --- | --- | 708.678 | 708.907 | 708.819 | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 708.853 | --- | --- | 708.828 | 708.998 | 708.819 | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 708.850 | --- | --- | 708.587 | 708.888 | 708.822 | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 708.847 | --- | --- | 708.814 | 708.874 | 708.818 | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 708.847 | --- | --- | 708.812 | 708.888 | 708.813 | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 708.840 | --- | --- | 708.819 | 708.847 | 708.810 | --- | --- | 14 |
| 15 | --- | --- | --- | --- | 708.837 | --- | --- | 708.883 | 708.840 | 708.813 | --- | --- | 15 |
| 16 | --- | --- | --- | --- | 708.837 | --- | --- | 708.782 | 708.837 | 708.813 | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 708.840 | --- | --- | 708.712 | 708.831 | 708.818 | --- | --- | 17 |
| 18 | --- | --- | --- | --- | 708.853 | --- | --- | 708.724 | 708.831 | 708.818 | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 708.853 | --- | --- | 708.721 | 708.831 | 708.822 | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 708.883 | --- | --- | 708.809 | 708.828 | 708.828 | --- | --- | 20 |
| 21 | --- | --- | --- | --- | 708.880 | --- | --- | 708.870 | 708.828 | 708.837 | --- | --- | 21 |
| 22 | --- | --- | --- | --- | 708.843 | --- | --- | 708.883 | 708.828 | 708.888 | --- | --- | 22 |
| 23 | --- | --- | --- | --- | 708.840 | --- | --- | 708.762 | 708.828 | 708.819 | --- | --- | 23 |
| 24 | --- | --- | --- | --- | 708.840 | --- | --- | 708.730 | 708.822 | 708.818 | --- | --- | 24 |
| 25 | --- | --- | --- | --- | 708.832 | --- | 708.881A | 708.879 | 708.819 | 708.813 | --- | --- | 25 |
| 26 | --- | --- | --- | --- | 708.748 | --- | 708.755 | 708.907 | 708.832 | 708.835 | --- | --- | 26 |
| 27 | --- | --- | --- | --- | 708.242 | --- | 708.709 | 708.881 | 708.818 | 708.877 | --- | --- | 27 |
| 28 | --- | --- | --- | --- | 708.888 | --- | 708.703 | 708.884 | 708.907 | 708.877 | --- | --- | 28 |
| 29 | --- | | --- | --- | 708.877 | --- | 708.708 | 708.814 | 708.907 | 708.888 | --- | --- | 29 |
| 30 | --- | | --- | --- | 708.888 | --- | 708.703 | 708.814 | 708.907 | 708.888 | --- | --- | 30 |
| 31 | --- | | --- | | 708.859 | | 708.884 | 708.883 | | 708.880 | | --- | 31 |
| MEAN | --- | --- | --- | --- | 708.883 | --- | --- | 708.808 | 708.880 | 708.837 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 709.748 | --- | --- | 709.014 | 709.044 | 708.877 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 708.837 | --- | --- | 708.587 | 708.907 | 708.810 | --- | --- | MIN |

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 42 18 N
LONG 99 40 00 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

A - MANUAL GAUGE

E - ESTIMATED

REGULATED SINCE 1961

DRAINAGE AREA,
2.59 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## BARRINGTON RIVER ABOVE FIRST RAPIDS - STATION NO. 08EB003

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7.13E | 6.02 | 4.89 | 6.09 | 4.67 | 22.5 | 23.8 | 17.3 | 11.0 | 8.26 | 6.80 | 6.25 | 1 |
| 2 | 7.02E | 6.08 | 4.87 | 4.06 | 4.70 | 22.9 | 23.8 | 17.0 | 10.8 | 8.17 | 6.85 | 6.26 | 2 |
| 3 | 6.92E | 5.98 | 4.88 | 4.02 | 5.05 | 22.4 | 24.2 | 16.7 | 10.8 | 7.98 | 6.83 | 6.30 | 3 |
| 4 | 6.78E | 5.92 | 4.84 | 3.99 | 5.85 | 22.3 | 24.5 | 16.5A | 10.7 | 7.87 | 6.82 | 6.38 | 4 |
| 5 | 6.64A | 5.87 | 4.85 | 3.93 | 6.89 | 22.2 | 24.4 | 16.3 | 10.8 | 7.98 | 6.78 | 6.36 | 5 |
| 6 | 6.61 | 5.85 | 4.81 | 3.88 | 8.12 | 21.8 | 24.4 | 16.2 | 10.6 | 7.85 | 6.70 | 6.30 | 6 |
| 7 | 6.54 | 5.78 | 4.82 | 3.86 | 9.80 | 21.9 | 24.3 | 15.9 | 10.6 | 7.68 | 6.71 | 6.30 | 7 |
| 8 | 6.52 | 5.71 | 4.85 | 3.84 | 11.8 | 21.7 | 23.8 | 15.8 | 10.5 | 7.52 | 6.72 | 6.32 | 8 |
| 9 | 6.48 | 5.70 | 4.81 | 3.77 | 14.8 | 21.5 | 23.5 | 15.4 | 10.5 | 7.43 | 6.73 | 6.17 | 9 |
| 10 | 6.40 | 5.86 | 4.78 | 3.78 | 18.9 | 21.3 | 23.2 | 15.3 | 10.4 | 7.32 | 6.74 | 6.08 | 10 |
| 11 | 6.40 | 5.87 | 4.78 | 3.88 | 19.4 | 21.4 | 22.8 | 15.0 | 10.3 | 7.36 | 6.80 | 6.00 | 11 |
| 12 | 6.33 | 5.87 | 4.73 | 3.86 | 21.8 | 21.6 | 22.5 | 14.8A | 10.1 | 7.33 | 6.77 | 5.91 | 12 |
| 13 | 6.30 | 5.86 | 4.70 | 3.83 | 22.8 | 22.1 | 22.2 | 14.3 | 9.88 | 7.18 | 6.88 | 5.87 | 13 |
| 14 | 6.28 | 5.88 | 4.85 | 3.81 | 22.8 | 22.1 | 21.8 | 14.3 | 9.82 | 7.07 | 6.48 | 5.77 | 14 |
| 15 | 6.20 | 5.84 | 4.83 | 3.88 | 22.8 | 21.8 | 21.6 | 14.0A | 9.80 | 6.93 | 6.41 | 5.71 | 15 |
| 16 | 6.12 | 5.80 | 4.88 | 3.83 | 21.3 | 21.8 | 21.5 | 13.8 | 9.63 | 6.86 | 6.31 | 5.68 | 16 |
| 17 | 6.03 | 5.68 | 4.62 | 3.48 | 20.7 | 21.6 | 21.3 | 13.5A | 9.48 | 6.87 | 6.26 | 5.65 | 17 |
| 18 | 6.02 | 5.68 | 4.68 | 3.47 | 20.8 | 22.4 | 21.1 | 13.3 | 9.85 | 6.87 | 6.18 | 5.65 | 18 |
| 19 | 5.97 | 5.61 | 4.63 | 3.38 | 20.0 | 22.8 | 20.9 | 13.2 | 9.81 | 6.78 | 6.23 | 5.68 | 19 |
| 20 | 5.85 | 5.36 | 4.61 | 3.33 | 20.8 | 23.8 | 20.9 | 13.2 | 9.78 | 6.44 | 6.28 | 5.68 | 20 |
| 21 | 6.04 | 5.27 | 4.37 | 3.26 | 21.7 | 23.8 | 20.0 | 13.2 | 9.80 | 6.32 | 6.27 | 5.69 | 21 |
| 22 | 6.07 | 5.23 | 4.38 | 3.31 | 22.8 | 23.5 | 19.9 | 13.2 | 9.80 | 6.31 | 6.30 | 5.62 | 22 |
| 23 | 6.13 | 5.32 | 4.36 | 3.78 | 23.5 | 23.4 | 19.5A | 12.8A | 9.67 | 6.39 | 6.30 | 5.58 | 23 |
| 24 | 6.12 | 5.18 | 4.30 | 4.00 | 23.8 | 23.3 | 19.1A | 12.6 | 9.63 | 6.28 | 6.28 | 5.59 | 24 |
| 25 | 6.14 | 5.18 | 4.21 | 3.88 | 23.4 | 23.1 | 18.8A | 12.6 | 9.30 | 6.28 | 6.22 | 5.60 | 25 |
| 26 | 6.18 | 5.12 | 4.20 | 4.01 | 23.0 | 23.1 | 18.7A | 12.6 | 9.06 | 6.36 | 6.23 | 5.63 | 26 |
| 27 | 6.16 | 5.10 | 4.28 | 4.08 | 22.8 | 23.2 | 18.4E | 12.5 | 9.11 | 6.18 | 6.17 | 5.67 | 27 |
| 28 | 6.09 | 5.08 | 4.26 | 4.10 | 22.8 | 23.3 | 18.2E | 12.2A | 9.01 | 6.79 | 6.08 | 5.69 | 28 |
| 29 | 6.14 | | 4.21 | 4.14 | 22.7 | 23.4 | 17.8E | 12.0 | 8.48 | 7.01 | 6.24 | 5.70 | 29 |
| 30 | 6.12 | | 4.18 | 4.28 | 22.8 | 23.3 | 17.8E | 11.8 | 8.37 | 6.84 | 6.24 | 5.74 | 30 |
| 31 | 6.08 | | 4.18 | | 22.8 | | 17.4A | 11.3 | | 6.88 | | 5.78 | 31 |
| TOTAL | 195.84 | 166.21 | 141.47 | 113.42 | 551.85 | 674.8 | 651.8 | 438.5 | 295.99 | 219.05 | 194.48 | 182.51 | TOTAL |
| MEAN | 6.32 | 5.84 | 4.58 | 3.78 | 17.8 | 22.5 | 21.3 | 14.1 | 9.87 | 7.07 | 6.48 | 5.89 | MEAN |
| MAX | 7.13 | 6.08 | 4.89 | 4.28 | 23.8 | 23.8 | 24.5 | 17.3 | 11.0 | 8.26 | 6.80 | 6.38 | MAX |
| MIN | 5.85 | 5.08 | 4.18 | 3.26 | 4.67 | 21.2 | 17.4 | 11.3 | 8.37 | 6.18 | 6.08 | 5.58 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 10.8
MAXIMUM DAILY, 24.5 ON JUL 4
MINIMUM DAILY, 3.26 ON APR 21
MAXIMUM INSTANTANEOUS,
24.7 AT 13:22 CST ON JUL 4

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 55 45 50 N
LONG 99 58 35 W
DRAINAGE AREA, 1 770 km²
A - MANUAL GAUGE

E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 19 900 | JUL | 57 200 |
| FEB | 13 400 | AUG | 37 900 |
| MAR | 12 200 | SEP | 25 800 |
| APR | 9 800 | OCT | 18 900 |
| MAY | 47 700 | NOV | 18 800 |
| JUN | 58 300 | DEC | 18 800 |

TOTAL DISCHARGE, 331 000 dam³

## BEAVER CREEK EAST OF BEAVER - STATION NO. 05LL026

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0 B | 0.0378 | 0.061 | 0 | 0.048 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0 B | 0.0848 | 0.108 | 0 | 0.040 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0 B | 0.1788 | 0.048 | 0 | 0.042 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0 B | 0.1558 | 0.038 | 0 | 0.038 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0 B | 0.8468 | 0.038 | 0 | 0.028 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0 B | 0.5838 | 0.027 | 0 | 0.018 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0 B | 0.2908 | 0.022 | 0 | 0.013 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0 B | 0.3188 | 0.051 | 0 | 0.013 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0 B | 0.0818 | 0.038 | 0 | 0.017 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0 B | 0.0808 | 0.033 | 0 | 0.018 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0 B | 0.1118 | 0.020 | 0.002 | 0.014 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0 B | 0.3598 | 0.018 | 0.187 | 0.018 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0 B | 0.5308 | 0.014 | 3.22 | 0.017 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0 B | 0.1898 | 0.011 | 4.89 | 0.012 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0 B | 0.0488 | 0.008 | 3.66 | 0.007 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0 B | 0.0148 | 0.008 | 2.82 | 0.004 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0 B | 0.0308 | 0.009 | 2.28 | 0.002 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0 B | 0.0418 | 0.010 | 1.85 | 0.001 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0 B | 0.0578 | 0.007 | 0.888 | 0 | 0.003 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0 B | 0.1928 | 0.007 | 0.524 | 0 | 0.008 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0 B | 0.0848 | 0.008 | 0.217 | 0 | 0.007 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0 B | 0.060 | 0.004 | 0.104 | 0 | 0.004 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0 B | 0.033 | 0.003 | 0.088 | 0 | 0.003 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0 B | 0.038 | 0.002 | 0.048 | 0 | 0.001 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0 B | 0.081 | 0.004 | 0.037 | 0 | 0.001 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0 B | 0.102 | 0.004 | 0.038 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0 B | 0.280 | 0.005 | 0.038 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0 B | 0.172 | 0.004 | 0.027 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0 B | 0.118 | 0.003 | 0.021 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0 B | 0.104 | 0.002 | 0.037 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0.0108 | | 0.001 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0.010 | 5.055 | 0.520 | 20.832 | 0.348 | 0.024 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.169 | 0.020 | 0.884 | 0.011 | 0.001 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0.010 | 0.848 | 0.108 | 4.89 | 0.048 | 0.007 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.014 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.188
MAXIMUM DAILY, 4.89 ON JUN 14
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
4.76 AT 15:48 CST ON JUN 14

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 04 00 N
LONG 99 37 40 W
DRAINAGE AREA, 389 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 30.2 |
| FEB | --- | AUG | 2.07 |
| MAR | 0.88 | SEP | 0 |
| APR | 437 | OCT | 0 |
| MAY | 53.8 | NOV | --- |
| JUN | 1 770 | DEC | --- |

TOTAL DISCHARGE, 2 290 dam³

## BEAVER LAKE NEAR PINE RIVER - STATION NO. 05LG501

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 701.031A | 701.037 | 701.387 | 701.031 | 701.088 | 701.082 | 701.180 | --- | 1 |
| 2 | --- | --- | --- | --- | 701.038E | 701.043 | 701.383 | 701.043 | 701.088 | 701.082 | 701.183 | --- | 2 |
| 3 | --- | --- | --- | --- | 701.042E | 701.048 | 701.388 | 701.087 | 701.088 | 701.082 | 701.188 | --- | 3 |
| 4 | --- | --- | --- | --- | 701.047E | 701.049 | 701.389 | 701.070 | 701.110 | 701.088 | 701.185 | --- | 4 |
| 5 | --- | --- | --- | --- | 701.052 | 701.052 | 701.375 | 701.088 | 701.110 | 701.089 | 701.184 | --- | 5 |
| 6 | --- | --- | --- | --- | 701.055 | 701.055 | 701.378 | 701.088 | 701.110 | 701.088 | 701.198A | --- | 6 |
| 7 | --- | --- | --- | --- | 701.058 | 701.064 | 701.381 | 701.083 | 701.118 | 701.088 | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 701.061 | 701.074 | 701.361 | 701.088 | 701.122 | 701.089 | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 701.067 | 701.077 | 701.384 | 701.088 | 701.131 | 701.088 | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 701.055 | 701.077 | 701.387 | 701.083 | 701.138 | 701.089 | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 701.055 | 701.088 | 701.345 | 701.070 | 701.141 | 701.088 | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 701.037 | 701.135 | 701.288 | 701.074 | 701.128 | 701.088 | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 701.022 | 701.189 | 701.208 | 701.074 | 701.088 | 701.077 | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 701.003 | 701.228 | 701.174 | 701.070 | 701.082 | 701.055 | --- | --- | 14 |
| 15 | --- | --- | --- | --- | 700.988 | 701.235 | 701.158 | 701.070 | 701.088 | 701.052 | --- | --- | 15 |
| 16 | --- | --- | 701.060A | --- | 700.870 | 701.241 | 701.182 | 701.067 | 701.088 | 701.052 | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 700.852 | 701.247 | 701.147 | 701.081 | 701.088 | 701.048 | --- | --- | 17 |
| 18 | --- | --- | --- | --- | 700.846 | 701.253 | 701.113 | 701.081 | 701.088 | 701.048 | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 700.858 | 701.247 | 701.113 | 701.081 | 701.088 | 701.043 | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 700.851 | 701.182 | 701.110 | 701.081 | 701.088 | 701.043 | --- | --- | 20 |
| 21 | --- | --- | --- | --- | 700.867 | 701.174 | 701.110 | 701.081 | 701.088 | 701.043 | --- | --- | 21 |
| 22 | --- | --- | --- | --- | 700.876 | 701.174 | 701.107 | 701.058 | 701.082 | 701.043 | --- | --- | 22 |
| 23 | --- | --- | --- | --- | 701.058 | 701.188 | 701.104 | 701.058 | 701.082 | 701.048 | --- | --- | 23 |
| 24 | --- | --- | --- | --- | 700.886 | 701.228 | 701.101 | 701.084 | 701.088 | 701.048 | --- | --- | 24 |
| 25 | --- | --- | --- | --- | 701.013 | 701.241 | 701.098 | 701.074 | 701.088 | 701.043 | --- | --- | 25 |
| 26 | --- | --- | --- | --- | 701.043 | 701.317 | 701.052 | 701.070 | 701.088 | 701.043 | --- | --- | 26 |
| 27 | --- | --- | --- | --- | 701.052 | 701.473 | 701.031 | 701.070 | 701.088 | 701.088 | --- | --- | 27 |
| 28 | --- | --- | --- | --- | 701.443 | 701.548 | 701.028 | 701.080 | 701.092 | 701.131 | 701.220A | --- | 28 |
| 29 | --- | | --- | --- | 701.036 | 701.518 | 701.031 | 701.101 | 701.092 | 701.158 | --- | --- | 29 |
| 30 | --- | | --- | --- | 701.081 | 701.380 | 701.031 | 701.104 | 701.092 | 701.188 | --- | --- | 30 |
| 31 | --- | | --- | | 701.031 | | 701.031 | 701.088 | | 701.174 | | --- | 31 |
| MEAN | --- | --- | --- | --- | 701.021 | 701.195 | 701.203 | 701.072 | 701.101 | 701.080 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 701.067 | 701.548 | 701.387 | 701.104 | 701.141 | 701.174 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 700.846 | 701.037 | 701.028 | 701.031 | 701.088 | 701.043 | --- | --- | MIN |

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 48 02 N
LONG 100 50 09 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

A - MANUAL GAUGE

E - ESTIMATED

REGULATED SINCE 1988

DRAINAGE AREA.
8.83 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## BELL LAKE NEAR NOVRA - STATION NO. 05LF501

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 680.218 | --- | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | --- | --- | --- | 680.307 | --- | --- | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 680.385 | --- | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 680.288 | --- | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | --- | --- | --- | 680.411 | 680.393 | --- | 680.718 | --- | --- | --- | 6 |
| 7 | --- | --- | --- | --- | --- | 680.411 | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | --- | --- | --- | --- | --- | 680.301 | --- | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 680.317 | --- | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | --- | --- | --- | --- | 680.378 | --- | --- | 680.488 | --- | --- | 12 |
| 13 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | --- | --- | --- | --- | --- | --- | 680.771 | --- | --- | --- | 14 |
| 15 | --- | --- | --- | --- | --- | 680.405 | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | --- | --- | --- | --- | --- | 680.301 | --- | --- | --- | --- | 16 |
| 17 | --- | --- | 680.084 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 680.428 | --- | --- | 19 |
| 20 | --- | --- | --- | --- | --- | --- | 680.378 | --- | 680.728 | --- | --- | --- | 20 |
| 21 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | --- | --- | --- | 680.359 | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | --- | --- | 680.359 | --- | --- | 680.323 | --- | --- | --- | --- | 23 |
| 24 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 680.420 | --- | --- | 25 |
| 26 | --- | --- | --- | --- | --- | --- | 680.301 | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | --- | --- | --- | --- | --- | --- | 680.831 | --- | --- | --- | 28 |
| 29 | --- | | --- | --- | --- | 680.386 | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | --- | --- | 680.448 | --- | --- | 680.881 | --- | --- | --- | --- | 30 |
| 31 | --- | | --- | | --- | | --- | --- | | --- | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MIN |

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 52 32 30 N
LONG 101 13 00 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

REGULATED SINCE 1988

DRAINAGE AREA.
68.1 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

REMARKS - PRIOR TO 1988 PUBLISHED AS "BELL LAKE NEAR OUTLET"

## BELL RIVER NEAR BELLSITE - STATION NO. 05LP003

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.1548 | 0.1518 | 0.614 | 0.597 | 0.930 | 0.332 | 2.38 | 1.18 | --- | --- | 1 |
| 2 | --- | --- | 0.1548 | 0.1518 | 0.734 | 0.595 | 0.788 | 0.384 | 1.88 | 1.18 | --- | --- | 2 |
| 3 | --- | --- | 0.1548 | 0.1518 | 0.858 | 0.623 | 0.837 | 0.436 | 1.68 | 1.18 | --- | --- | 3 |
| 4 | --- | --- | 0.1548 | 0.1518 | 0.844 | 0.595 | 0.594 | 0.374 | 1.78 | 1.20 | --- | --- | 4 |
| 5 | --- | --- | 0.1548 | 0.1518 | 0.827 | 0.858 | 0.578 | 0.590 | 1.83 | 1.21 | --- | --- | 5 |
| 6 | --- | --- | 0.1548 | 0.1518 | 0.804 | 0.621 | 0.582 | 0.838 | 1.88 | 1.18 | --- | --- | 6 |
| 7 | --- | --- | 0.1548 | 0.1518 | 0.818 | 0.880 | 0.884 | 0.842 | 1.88 | 1.14 | --- | --- | 7 |
| 8 | --- | --- | 0.1548 | 0.1518 | 0.880 | 0.827 | 0.847 | 0.471 | 1.88 | 1.10 | --- | --- | 8 |
| 9 | --- | --- | 0.1548 | 0.1518 | 0.868 | 0.472 | 0.582 | 0.432 | 1.88 | 1.07 | --- | --- | 9 |
| 10 | --- | --- | 0.1548 | 0.1518 | 0.878 | 0.448 | 0.488 | 0.388 | 1.90 | 1.04 | --- | --- | 10 |
| 11 | --- | --- | 0.1538 | 0.1518 | 0.880 | 0.478 | 0.488 | 0.383 | 1.70 | 0.990 | --- | --- | 11 |
| 12 | --- | --- | 0.1538 | 0.1788 | 0.448 | 0.623 | 0.598 | 0.478 | 1.78 | 1.01 | --- | --- | 12 |
| 13 | --- | --- | 0.1538 | 0.2058 | 0.412 | 0.858 | 0.587 | 0.878 | 1.80 | 0.985 | --- | --- | 13 |
| 14 | --- | --- | 0.1538 | 0.2408 | 0.387 | 0.788 | 0.582 | 0.787 | 1.42 | 1.02 | --- | --- | 14 |
| 15 | --- | --- | 0.1538 | 0.2588 | 0.408 | 0.738 | 0.847 | 0.828 | 1.34 | 1.04 | --- | --- | 15 |
| 16 | --- | --- | 0.1538 | 0.2788 | 0.458 | 0.840 | 0.810 | 0.832 | 1.27 | 0.818 | --- | --- | 16 |
| 17 | --- | --- | 0.1538 | 0.3068 | 0.423 | 0.822 | 0.808 | 0.434 | 1.34 | 0.887 | --- | --- | 17 |
| 18 | --- | --- | 0.1538 | 0.3818 | 0.417 | 0.822 | 0.883 | 0.490 | 1.21 | 0.873 | --- | --- | 18 |
| 19 | --- | --- | 0.1538 | 0.5108 | 0.441 | 0.880 | 0.885 | 0.421 | 1.18A | 0.885 | --- | --- | 19 |
| 20 | --- | --- | 0.1538 | 1.03 B | 0.780 | 0.527 | 0.814 | 0.474 | 1.18A | 0.810 | --- | --- | 20 |
| 21 | --- | --- | 0.1538 | 2.48 B | 0.880 | 0.469 | 0.808 | 0.873 | 1.08 | 0.740 | --- | --- | 21 |
| 22 | --- | --- | 0.1528 | 4.37 B | 0.748 | 0.804 | 0.845 | 0.848 | 1.14 | 0.758 | --- | --- | 22 |
| 23 | --- | --- | 0.1528 | 3.21 B | 0.858 | 0.804 | 0.488 | 0.882 | 1.18 | 0.742 | --- | --- | 23 |
| 24 | --- | --- | 0.1528 | 2.28 | 0.758 | 0.838 | 0.483 | 0.480 | 1.18 | 0.713 | --- | --- | 24 |
| 25 | --- | --- | 0.1528 | 1.74 | 1.47 | 0.727 | 0.437 | 0.847 | 1.20 | 0.734 | --- | --- | 25 |
| 26 | --- | --- | 0.1528 | 1.55 | 1.38 | 1.23 | 0.408 | 0.782 | 1.18 | 0.878 | --- | --- | 26 |
| 27 | --- | --- | 0.1528 | 1.33 | 1.12 | 1.08 | 0.378 | 0.848 | 1.18 | 0.858 | --- | --- | 27 |
| 28 | --- | --- | 0.1528 | 1.17 | 0.908 | 1.51 | 0.310 | 2.52 | 1.18 | 1.04 | --- | --- | 28 |
| 29 | --- | | 0.1528 | 1.02 | 0.780 | 1.30 | 0.334 | 7.84 | 1.18 | 0.943 | --- | --- | 29 |
| 30 | --- | | 0.1528 | 0.804 | 0.687 | 1.12 | 0.328 | 5.04 | 1.17 | 0.888 | --- | --- | 30 |
| 31 | --- | | 0.1528 | | 0.804 | | 0.330 | 3.06 | | 0.813 | | | 31 |
| TOTAL | --- | --- | 4.743 | 25.107 | 21.052 | 21.671 | 18.389 | 32.889 | 44.34 | 29.888 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.153 | 0.837 | 0.879 | 0.722 | 0.828 | 1.06 | 1.48 | 0.857 | --- | --- | MEAN |
| MAX | --- | --- | 0.154 | 4.37 | 1.47 | 1.08 | 0.930 | 7.84 | 2.38 | 1.21 | --- | --- | MAX |
| MIN | --- | --- | 0.152 | 0.151 | 0.387 | 0.448 | 0.310 | 0.332 | 1.08 | 0.878 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.788
MAXIMUM DAILY, 7.84 ON AUG 29
MINIMUM DAILY, 0.1518 ON APR 2
MAXIMUM INSTANTANEOUS,
8.87 AT 03:57 CST ON AUG 29

TYPE OF GAUGE - RECORDING
LOCATION - LAT 52 38 10 N
LONG 101 02 15 W
DRAINAGE AREA, 170 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

REGULATED SINCE 1955

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL 1 420 | |
| FEB | --- | AUG 2 440 | |
| MAR | 410 | SEP 3 830 | |
| APR | 2 170 | OCT 2 880 | |
| MAY | 1 830 | NOV | --- |
| JUN | 1 870 | DEC | --- |

TOTAL DISCHARGE, 15 900 dam³

## BERENS RIVER AT OUTLET OF LONG LAKE - STATION NO. 05RD007

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 9.908 | 11.2A | 11.3A | 9.97 | 12.7 | 22.3 | 48.8 | 50.2 | 48.3 | 28.8 | 22.3 | 18.8 | 1 |
| 2 | 9.938 | 11.1A | 11.4A | 9.88 | 12.8 | 22.4 | 47.8 | 50.3 | 48.4 | 28.3 | 21.8 | 18.4 | 2 |
| 3 | 9.838 | 11.2A | 11.4A | 9.81 | 12.8 | 23.3 | 48.8 | 53.8 | 48.3 | 28.8 | 21.8 | 18.4 | 3 |
| 4 | 9.868 | 11.2 | 11.3 | 9.82 | 12.8 | 22.2 | 50.4 | 53.5 | 44.0 | 28.8 | 21.8 | 18.4 | 4 |
| 5 | 9.988 | 11.3 | 11.2 | 9.80 | 12.7 | 22.1 | 51.3 | 53.8 | 43.1 | 28.3 | 21.8 | 18.2 | 5 |
| 6 | 9.988 | 11.3 | 11.2 | 9.77 | 12.9 | 21.8 | 51.8 | 53.8 | 42.1 | 27.8 | 21.4 | 17.8 | 6 |
| 7 | 9.878 | 11.4 | 11.3 | 9.88 | 12.9 | 21.8 | 51.9 | 53.8 | 41.3 | 27.7 | 21.3 | 17.7 | 7 |
| 8 | 9.948 | 11.4 | 11.3 | 9.84 | 12.8 | 21.2 | 52.8 | 53.7 | 41.2 | 27.3 | 21.4 | 17.8 | 8 |
| 9 | 10.0 B | 11.5 | 11.2 | 9.88 | 12.8 | 20.8 | 52.8 | 53.7 | 40.8 | 27.2 | 21.3 | 17.8 | 9 |
| 10 | 10.1 B | 11.8 | 11.2 | 9.84 | 12.8 | 20.8 | 52.8 | 53.1 | 40.1 | 27.0 | 21.2 | 17.4 | 10 |
| 11 | 10.2 B | 11.8 | 11.1 | 9.48 | 12.8 | 20.0 | 52.8 | 52.8 | 39.8 | 26.8 | 21.1 | 17.3A | 11 |
| 12 | 10.2 B | 11.8 | 10.8 | 9.48 | 13.2 | 20.8 | 52.8 | 51.8 | 39.4 | 26.8 | 21.1 | 17.1A | 12 |
| 13 | 10.4 B | 11.8 | 10.8 | 9.42 | 13.1 | 21.2 | 52.8 | 50.8 | 39.2 | 26.8 | 21.0 | 16.7A | 13 |
| 14 | 10.8 B | 11.8A | 10.8 | 9.38 | 12.0 | 21.2 | 52.8 | 48.8 | 38.8 | 26.3 | 20.8 | 16.8 | 14 |
| 15 | 10.8 B | 11.4A | 10.8A | 9.38 | 11.8 | 21.8 | 53.3 | 46.8 | 38.8 | 26.0 | 20.8 | 16.8 | 15 |
| 16 | 10.8 B | 11.4A | 10.7 | 9.38 | 11.8 | 21.7 | 54.3 | 46.3 | 38.1 | 25.8 | 20.8 | 16.4 | 16 |
| 17 | 10.8 B | 11.4A | 10.8 | 9.44 | 11.8 | 22.0 | 54.1 | 47.8 | 37.8 | 25.8 | 20.4 | 16.2A | 17 |
| 18 | 10.7 B | 11.4 | 10.8A | 9.38 | 12.7 | 22.7 | 54.8 | 48.8 | 37.0 | 25.3 | 20.3 | 16.0A | 18 |
| 19 | 10.8 B | 11.5 | 10.8 | 9.31 | 13.0 | 23.8 | 54.8 | 48.3 | 36.8 | 24.8 | 20.3 | 15.9A | 19 |
| 20 | 10.8 B | 11.4 | 10.8 | 9.38 | 13.8 | 23.8 | 54.8 | 48.8 | 38.2 | 24.8 | 20.0 | 15.8A | 20 |
| 21 | 11.0 B | 11.4 | 10.4 | 9.58 | 13.8 | 24.8 | 54.8 | 47.2 | 38.8 | 24.4 | 19.8 | 15.8 | 21 |
| 22 | 11.1 B | 11.4A | 10.4 | 9.97 | 13.8 | 26.8 | 54.2 | 48.8 | 34.2 | 24.1 | 19.7 | 15.7 | 22 |
| 23 | 11.0 B | 11.4 | 10.4 | 10.4 | 13.7 | 26.7 | 53.8 | 52.8 | 34.0 | 23.8 | 19.8 | 15.8 | 23 |
| 24 | 11.0 B | 11.4 | 10.3 | 10.7 | 13.7 | 26.1 | 53.8 | 54.8 | 33.4 | 23.8 | 19.8 | 15.8 | 24 |
| 25 | 11.2 B | 11.4 | 10.4 | 11.0 | 14.8 | 28.7 | 54.4 | 55.7 | 32.8 | 23.4 | 19.4 | 15.7 | 25 |
| 26 | 11.2 B | 11.4 | 10.3 | 11.3 | 17.4 | 31.7 | 53.3 | 55.8 | 32.3 | 23.2 | 19.1 | 15.7 | 26 |
| 27 | 11.2 | 11.4A | 10.2 | 11.7 | 18.8 | 35.2 | 52.7 | 55.0 | 32.1 | 23.1 | 19.0 | 15.8 | 27 |
| 28 | 11.3 | 11.3 | 10.1 | 12.0 | 19.8 | 37.8 | 53.2 | 54.0 | 31.2 | 23.0 | 18.8 | 15.8 | 28 |
| 29 | 11.3 | | 10.0 | 12.2 | 20.8 | 40.7 | 51.3 | 53.8 | 30.7 | 22.8 | 18.8 | 15.4 | 29 |
| 30 | 11.3 | | 10.0 | 12.4 | 21.8 | 43.8 | 50.8 | 51.8 | 30.8 | 22.7 | 18.7 | 15.4 | 30 |
| 31 | 11.2 | | 10.0 | | 23.0 | | 50.2 | 49.8 | | 22.8 | | 15.4 | 31 |
| TOTAL | 327.88 | 318.8 | 332.7 | 302.78 | 441.4 | 788.1 | 1 632.8 | 1 597.8 | 1 141.1 | 788.8 | 614.8 | 518.7 | TOTAL |
| MEAN | 10.8 | 11.4 | 10.7 | 10.1 | 14.3 | 28.3 | 52.3 | 51.8 | 38.0 | 25.7 | 20.8 | 16.7 | MEAN |
| MAX | 11.3 | 11.8 | 11.4 | 12.4 | 23.0 | 43.8 | 54.8 | 55.8 | 48.3 | 28.8 | 22.3 | 18.8 | MAX |
| MIN | 9.90 | 11.1 | 10.0 | 9.31 | 11.8 | 20.0 | 48.8 | 46.8 | 30.8 | 22.8 | 18.7 | 15.4 | MIN |

### SUMMARY FOR THE YEAR 1989

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 24.0
MAXIMUM DAILY, 55.8 ON AUG 28
MINIMUM DAILY, 9.31 ON APR 19
MAXIMUM INSTANTANEOUS,
56.1 AT 08:28 CST ON AUG 28

TYPE OF GAUGE - RECORDING
LOCATION - LAT 52 12 10 N
LONG 98 08 10 W

A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 28 300 | JUL | 140 000 |
| FEB | 27 800 | AUG | 138 000 |
| MAR | 28 700 | SEP | 98 800 |
| APR | 26 200 | OCT | 88 800 |
| MAY | 38 100 | NOV | 63 100 |
| JUN | 85 800 | DEC | 44 800 |

TOTAL DISCHARGE, 758 000 dam³

## BIG GRASS RIVER ANGLE DITCH NEAR GLENELLA - STATION NO. 05LL026

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.010 | 0 E | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0.0088 | 0.008 | 0 E | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0.003 | 0.008 | 0 E | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0.007 | 0.008 | 0 E | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0.014 | 0.007 | 0 E | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0.012 | 0.007 | 0 E | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.001 | 0.003 | 0 A | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0 | 0.007 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.027 | 0.013 | 0 | 0.001 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.043 | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.044 | 0.004 | 0 | 0.138 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.031 | 0 | 0 | 0.011 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.073 | 0 | 0.287 | 0.001 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.107 | 0 | 1.83 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.088 | 0 | 0.893 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.083 | 0 | 0.851 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.048 | 0 | 0.488 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.034 | 0 | 0.384 | 0 A | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.021 | 0 | 0.288 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.013 | 0 | 0.238 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.006 | 0 | 0.147 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.001 | 0 | 0.073 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0 | 0 | 0.048 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.044 | 0 | 0.024 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.118 | 0 | 0.007 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.048 | 0 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.038 | 0 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.023 | 0 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.018 | 0 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.018 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0 A | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 1.002 | 0.077 | 5.195 | 0.149 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.033 | 0.002 | 0.173 | 0.005 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.118 | 0.013 | 1.83 | 0.138 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.026
MAXIMUM DAILY, 1.83 ON JUN 14
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
1.87 AT 07:14 CST ON JUN 14

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 33 37 N
LONG 99 09 23 W
DRAINAGE AREA; 480 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 12.9 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 88.8 | OCT | 0 |
| MAY | 5.85 | NOV | --- |
| JUN | 449 | DEC | --- |

TOTAL DISCHARGE, 695 dam³

REMARKS - PUBLISHED AS GLENELLA DRAIN PRIOR TO 1988. PUBLISHED AS "ANGLE DRAIN NEAR GLENELLA" IN 1987

## BIG GRASS RIVER NEAR GLENELLA - STATION NO. 05LL015

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.048 | 0 | 0.107 | 0 | 0E | 0E | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.046 | 0 | 0.081 | 0 | 0E | 0E | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0.047 | 0 | 0.051 | 0 | 0A | 0E | --- | --- | 3 |
| 4 | --- | --- | 0B | 0.0188 | 0.040 | 0 | 0.024 | 0 | 0E | 0E | --- | --- | 4 |
| 5 | --- | --- | 0B | 0.143 | 0.030 | 0 | 0.017 | 0 | 0A | 0E | --- | --- | 5 |
| 6 | --- | --- | 0B | 0.120 | 0.020 | 0 | 0.008 | 0 | 0A | 0E | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.102 | 0.010 | 0 | 0.003 | 0 | 0E | 0E | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.078 | 0.002 | 0 | 0.008 | 0 | 0E | 0E | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.042 | 0.002 | 0 | 0.015 | 0 | 0E | 0E | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.020 | 0.002 | 0 | 0.012 | 0 | 0E | 0E | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.008 | 0.020 | 0 | 0.007 | 0 | 0E | 0E | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.001 | 0.001 | 0 | 0.012 | 0 | 0E | 0E | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.002 | 0 | 0 | 0.011 | 0 | 0E | 0E | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.145 | 0 | 0.845 | 0.007 | 0 | 0E | 0E | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.328 | 0 | 1.14 | 0.001 | 0 | 0E | 0E | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.183 | 0 | 0.387 | 0 | 0 | 0E | 0E | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.183 | 0 | 0.135 | 0 | 0 | 0E | 0E | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.278 | 0 | 0.072 | 0 | 0 | 0A | 0A | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.215 | 0 | 0.584 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.208 | 0 | 1.80 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.150 | 0 | 1.52 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.089 | 0 | 1.35 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.052 | 0 | 0.880 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.055 | 0 | 0.452 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.127 | 0 | 0.232 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.261 | 0 | 0.171 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.187 | 0 | 0.206 | 0 | 0A | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.122 | 0 | 0.147 | 0 | 0A | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.086 | 0 | 0.148 | 0 | 0A | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.087 | 0 | 0.111 | 0 | 0A | 0A | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | 0 | 0A | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 3.182 | 0.388 | 9.821 | 0.378 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.106 | 0.008 | 0.331 | 0.012 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.278 | 0.048 | 1.80 | 0.107 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.056
MAXIMUM DAILY, 1.80 ON JUN 20
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
2.51 AT 19:19 CST ON JUN 14

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 30 33 N
LONG 99 54 19 W
DRAINAGE AREA, 1 070 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 32.6 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 272 | OCT | 0 |
| MAY | 23.2 | NOV | --- |
| JUN | 867 | DEC | --- |

TOTAL DISCHARGE, 1 180 dam³

## BIG ISLAND LAKE NEAR FLIN FLON - STATION NO. 05KG005

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 283.248 | --- | 283.381 | 283.283 | 283.288 | 283.264 | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 283.250 | --- | 283.380 | 283.282 | 283.286 | 283.258A | --- | --- | 2 |
| 3 | --- | --- | --- | --- | 283.248 | --- | 283.384 | 283.288 | 283.284 | 283.254E | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 283.254 | --- | 283.382 | 283.301 | 283.288 | 283.249A | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 283.253 | --- | 283.384 | 283.287 | 283.288 | 283.253 | --- | --- | 5 |
| 6 | --- | --- | --- | --- | 283.252 | --- | 283.378 | 283.281 | 283.279 | 283.248 | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 283.254 | --- | 283.377 | 283.280 | 283.274 | 283.247 | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 283.253 | --- | 283.378 | 283.288 | 283.281 | 283.248 | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 283.258 | --- | 283.378 | 283.284 | 283.284 | 283.248 | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 283.280 | --- | 283.372 | 283.282 | 283.285 | 283.247 | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 283.281 | --- | 283.388 | 283.281 | 283.283 | 283.258 | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 283.286 | --- | 283.387 | 283.282 | 283.278 | 283.258 | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 283.273 | --- | 283.388 | 283.272 | 283.280 | 283.257 | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 283.278 | --- | 283.384 | 283.267 | 283.278 | 283.261 | --- | --- | 14 |
| 15 | --- | --- | 283.198A | --- | 283.277 | --- | 283.381 | 283.284 | 283.283 | 283.261 | --- | --- | 15 |
| 16 | --- | --- | --- | --- | 283.282 | --- | 283.367 | 283.281 | 283.282 | 283.280 | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 283.290 | --- | 283.388 | 283.286 | 283.282 | 283.288 | --- | --- | 17 |
| 18 | --- | --- | --- | 283.218A | 283.287 | --- | 283.381 | 283.283 | 283.281 | 283.285 | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 283.304 | --- | 283.348 | 283.303 | 283.278 | 283.285 | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 283.328 | --- | 283.343 | 283.248 | 283.278 | 283.288 | --- | --- | 20 |
| 21 | --- | --- | --- | --- | 283.338 | --- | 283.333 | 283.247 | 283.278 | 283.283 | --- | --- | 21 |
| 22 | --- | --- | --- | --- | 283.345 | --- | 283.327 | 283.243 | 283.278 | 283.284 | --- | --- | 22 |
| 23 | --- | --- | --- | --- | 283.347A | --- | 283.324 | 283.243 | 283.270 | 283.284 | --- | --- | 23 |
| 24 | --- | --- | --- | --- | --- | --- | 283.318 | 283.280 | 283.273 | 283.282 | --- | --- | 24 |
| 25 | --- | --- | --- | --- | --- | --- | 283.316 | 283.284 | 283.289 | 283.283 | --- | --- | 25 |
| 26 | --- | --- | --- | --- | --- | 283.338 | 283.313 | 283.278 | 283.284 | 283.288 | --- | --- | 26 |
| 27 | --- | --- | --- | --- | --- | 283.350 | 283.302 | 283.278 | 283.283 | 283.271 | --- | --- | 27 |
| 28 | --- | --- | --- | --- | --- | 283.358 | 283.297 | 283.278 | 283.281 | 283.276 | --- | --- | 28 |
| 29 | --- | | --- | --- | --- | 283.373 | 283.286 | 283.277 | 283.280 | 283.278 | --- | --- | 29 |
| 30 | --- | | --- | --- | --- | 283.378 | 283.287 | 283.275 | 283.282 | 283.260A | --- | --- | 30 |
| 31 | --- | | --- | | --- | | 283.284 | 283.270 | | 283.278E | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | --- | 283.348 | 283.273 | 283.274 | 283.266 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | 283.384 | 283.301 | 283.288 | 283.280 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | --- | 283.284 | 283.243 | 283.280 | 283.248 | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MAXIMUM DAILY, 283.384 ON JUL 3

MAXIMUM INSTANTANEOUS, 283.386 AT 05:23 CST ON JUL 3

TYPE OF GAUGE - RECORDING
LOCATION - LAT 54 43 00 N
LONG 101 48 00 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED

DRAINAGE AREA, 132 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1974 ADJ.)

REMARKS - PREVIOUS TO 1986 PUBLISHED UNDER THE NAME "MANISTIKWAN LAKE NEAR FLIN FLON"

## BIG WHITESHELL LAKE AT BIG WHITESHELL LAKE - STATION NO. 05PG801

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 310.648E | 310.677 | 310.805 | 310.743 | 310.633 | 310.336 | 310.161 | --- | 1 |
| 2 | --- | --- | --- | --- | 310.641 | 310.674E | 310.811 | 310.738 | 310.639 | 310.312 | --- | --- | 2 |
| 3 | --- | --- | --- | --- | 310.637 | 310.672E | 310.809 | 310.735 | 310.630 | 310.312 | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 310.653E | 310.689E | 310.811 | 310.733 | 310.624 | 310.308 | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 310.688E | 310.695 | 310.821 | 310.706 | 310.621 | 310.304 | --- | --- | 5 |
| 6 | --- | --- | --- | --- | 310.681E | 310.678E | 310.818 | 310.669 | 310.620 | 310.308 | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 310.698E | 310.686 | 310.818 | 310.673 | 310.621 | 310.297 | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 310.810 | 310.686 | 310.813 | 310.682 | 310.613 | 310.286 | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 310.813E | 310.682E | 310.808 | 310.690 | 310.609 | 310.281 | --- | --- | 9 |
| 10 | --- | --- | 310.301 | --- | 310.817E | 310.698E | 310.800 | 310.638 | 310.603 | 310.289 | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 310.820 | 310.695 | 310.695 | 310.625 | 310.497 | 310.288 | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 310.815E | 310.825 | 310.804 | 310.611 | 310.495 | 310.278 | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 310.810E | 310.840E | 310.801 | 310.595 | 310.484 | 310.271 | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 310.804E | 310.695 | 310.895 | 310.578 | 310.469 | 310.267 | --- | --- | 14 |
| 15 | --- | --- | --- | --- | 310.589 | 310.687 | 310.890 | 310.595 | 310.488 | 310.270 | --- | --- | 15 |
| 16 | --- | --- | --- | --- | 310.597E | 310.704 | 310.884 | 310.581 | 310.473 | 310.268 | --- | --- | 16 |
| 17 | --- | --- | --- | 310.312 | 310.598E | 310.718 | 310.884 | 310.561 | 310.470 | 310.278 | --- | --- | 17 |
| 18 | --- | --- | --- | --- | 310.594E | 310.738 | 310.888 | 310.582 | 310.487 | 310.278 | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 310.603E | 310.760 | 310.878 | 310.575 | 310.484 | 310.280 | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 310.591E | 310.767 | 310.871 | 310.564 | 310.447 | 310.288 | --- | --- | 20 |
| 21 | --- | --- | --- | --- | 310.580E | 310.788 | 310.885 | 310.559 | 310.437 | 310.250 | --- | --- | 21 |
| 22 | --- | --- | --- | --- | 310.586 | 310.809 | 310.853 | 310.549 | 310.413 | 310.233 | --- | --- | 22 |
| 23 | --- | --- | --- | --- | 310.588 | 310.828 | 310.844 | 310.545 | 310.406 | 310.214 | --- | --- | 23 |
| 24 | --- | --- | --- | --- | 310.586 | 310.836 | 310.832 | 310.545 | 310.403 | 310.208 | --- | --- | 24 |
| 25 | --- | --- | --- | --- | 310.578 | 310.852 | 310.819 | 310.544 | 310.388 | 310.200 | --- | --- | 25 |
| 26 | --- | --- | --- | --- | 310.578E | 310.858 | 310.801 | 310.547 | 310.377 | 310.187 | --- | --- | 26 |
| 27 | --- | --- | --- | --- | 310.577E | 310.862 | 310.778 | 310.538 | 310.374 | 310.207 | --- | --- | 27 |
| 28 | --- | --- | --- | --- | 310.577 | 310.868 | 310.783 | 310.538 | 310.358 | 310.191 | --- | --- | 28 |
| 29 | --- | | --- | --- | 310.577E | 310.883 | 310.783 | 310.536 | 310.348 | 310.177 | --- | --- | 29 |
| 30 | --- | | --- | --- | 310.577E | 310.858 | 310.781 | 310.538 | 310.340 | 310.189 | --- | --- | 30 |
| 31 | --- | | --- | | 310.577E | | 310.780 | 310.533 | | 310.185E | | --- | 31 |
| MEAN | --- | --- | --- | --- | 310.588 | 310.708 | 310.835 | 310.603 | 310.461 | 310.256 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 310.820 | 310.858 | 310.821 | 310.743 | 310.632 | 310.328 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 310.577 | 310.686 | 310.780 | 310.533 | 310.340 | 310.185 | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MAXIMUM DAILY, 310.821 ON JUL 5

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 05 00 N
LONG 95 21 30 W
DATA CONTRIBUTED BY - MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

NATURAL FLOW

DRAINAGE AREA, 76.8 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

REMARKS - PRIOR TO 1988 PUBLISHED AS "WHITESHELL LAKE AT CAMPGROUND"

## BIRCH RIVER ABOVE BRACKEN DAM NEAR THE PAS - STATION NO. 05KH003

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 259.884 | 259.894 | 259.888 | 259.880 | 259.884 | 259.808 | 259.810 | 259.913 | --- | --- | 1 |
| 2 | --- | --- | 259.897 | 259.892 | 259.886 | 259.885 | 259.901 | 259.784 | 259.804 | 259.840 | --- | --- | 2 |
| 3 | --- | --- | 259.888 | 259.888 | 259.881 | 259.884 | 259.881 | 259.784 | 259.802 | 259.847 | --- | --- | 3 |
| 4 | --- | --- | 259.887 | 259.909 | 259.882 | 259.878 | 259.878 | 259.792 | 259.825 | 259.884 | --- | --- | 4 |
| 5 | --- | --- | 259.894 | 259.928 | 259.880 | 259.873 | 259.877 | 259.784 | 259.833 | 259.972 | --- | --- | 5 |
| 6 | 259.895 | 259.927 | 259.851 | 259.847 | 259.875 | 259.787 | 259.825 | 259.958 | --- | --- | 6 |
| 7 | 259.902 | 259.928 | 259.938 | 259.848 | 259.871 | 259.787 | 259.851 | 259.943 | --- | --- | 7 |
| 8 | 259.900 | 259.928 | 259.936 | 259.852 | 259.884 | 259.791 | 259.870 | 259.950 | --- | --- | 8 |
| 9 | 259.888 | 259.928 | 259.918 | 259.818 | 259.875 | 259.788 | 259.896 | 259.884 | --- | --- | 9 |
| 10 | 259.900 | 259.928 | 259.908 | 259.836 | 259.897 | 259.784 | 259.893 | 259.951 | --- | --- | 10 |
| 11 | 259.880 | 259.931 | 259.901 | 259.832 | 259.885 | 259.782 | 259.880 | 259.974 | --- | --- | 11 |
| 12 | 259.891 | 259.942 | 259.906 | 259.818 | 259.871 | 259.778 | 259.899 | 259.958 | --- | --- | 12 |
| 13 | 259.898 | 259.956 | 259.913 | 259.831 | 259.878 | 259.765 | 259.902 | 259.933 | --- | --- | 13 |
| 14 | 259.893 | 259.950 | 259.894 | 259.835 | 259.873 | 259.769 | 259.892 | 259.928A | --- | --- | 14 |
| 15 | 259.858 | 259.956 | 259.907 | 259.830 | 259.859 | 259.787 | 259.910 | --- | --- | --- | 15 |
| 16 | 259.880 | 259.955 | 259.892 | 259.828 | 259.863 | 259.784 | 259.891 | --- | --- | --- | 16 |
| 17 | 259.885 | 259.952 | 259.900 | 259.840 | 259.858 | 259.784 | 259.902 | --- | --- | --- | 17 |
| 18 | 259.867 | 259.953 | 259.904 | 259.840 | 259.853 | 259.784 | 259.912 | --- | --- | --- | 18 |
| 19 | 259.867 | 259.963 | 259.892 | 259.830 | 259.854 | 259.783 | 259.914 | --- | --- | --- | 19 |
| 20 | 259.880 | 259.958 | 259.900 | 259.848 | 259.847 | 259.758 | 259.926 | --- | --- | --- | 20 |
| 21 | 259.878 | 259.954 | 259.822 | 259.838 | 259.836 | 259.758 | 259.925 | --- | --- | --- | 21 |
| 22 | 259.881 | 259.973 | 259.821 | 259.818 | 259.832 | 259.748 | 259.927 | --- | --- | --- | 22 |
| 23 | 259.884 | 259.978 | 259.800 | 259.818 | 259.832 | 259.740 | 259.930 | --- | --- | --- | 23 |
| 24 | 259.888 | 259.980 | 259.840 | 259.821 | 259.823 | 259.758 | 259.938 | --- | --- | --- | 24 |
| 25 | 259.890 | 259.978 | 259.888 | 259.822 | 259.834 | 259.760 | 259.930 | --- | --- | --- | 25 |
| 26 | 259.888 | 259.973 | 259.893 | 259.854 | 259.824 | 259.783 | 259.922 | --- | --- | --- | 26 |
| 27 | 259.885 | 259.973 | 259.908 | 259.852 | 259.814 | 259.801 | 259.933 | --- | --- | --- | 27 |
| 28 | 259.881 | 259.967 | 259.898 | 259.852 | 259.808 | 259.784 | 259.948 | --- | --- | --- | 28 |
| 29 | 259.883 | 259.951 | 259.898 | 259.864 | 259.807 | 259.808 | 259.921 | --- | --- | --- | 29 |
| 30 | 259.880 | 259.964 | 259.888 | 259.888 | 259.813 | 259.810 | 259.911 | --- | --- | --- | 30 |
| 31 | 259.867 | | 259.893 | | 259.807 | 259.808 | | --- | | --- | 31 |
| MEAN | 259.880 | 259.948 | 259.914 | 259.848 | 259.853 | 259.780 | 259.891 | --- | --- | --- | MEAN |
| MAX | 259.902 | 259.980 | 259.948 | 259.888 | 259.901 | 259.810 | 259.948 | --- | --- | --- | MAX |
| MIN | 259.858 | 259.892 | 259.880 | 259.818 | 259.807 | 259.740 | 259.802 | --- | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

TYPE OF GAUGE - RECORDING
LOCATION - LAT 53 49 30 N
LONG 101 19 30 W

A - MANUAL GAUGE

MAXIMUM DAILY, 259.980 ON APR 24
MINIMUM DAILY, 259.740 ON AUG 23
MAXIMUM INSTANTANEOUS,
260.000 AT 14:35 CST ON OCT 5

REGULATED

DRAINAGE AREA,
2 350 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1974 ADJ.)

## BIRCH RIVER BELOW BRACKEN DAM NEAR THE PAS - STATION NO. 05KH004

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 257.862 | 257.031 | 256.288 | 257.267 | 256.851 | 256.747 | 257.500 | 257.432 | --- | --- | 1 |
| 2 | --- | --- | 257.844A | 257.006 | 256.163 | 257.311 | 256.813 | 256.748 | 257.545 | 257.384 | --- | --- | 2 |
| 3 | --- | --- | --- | 256.995 | 256.076 | 257.343 | 256.844 | 256.834 | 257.551 | 257.193 | --- | --- | 3 |
| 4 | --- | --- | --- | 256.990 | 257.984 | 257.381 | 256.842 | 257.084 | 257.532 | 257.063 | --- | --- | 4 |
| 5 | --- | --- | --- | 256.992 | 257.920 | 257.402 | 256.853 | 257.178 | 257.544 | 256.978 | --- | --- | 5 |
| 6 | --- | --- | --- | 256.988 | 257.868 | 257.384 | 256.850 | 257.218 | 257.538 | 256.908 | --- | --- | 6 |
| 7 | --- | --- | --- | 256.997 | 257.788 | 257.387 | 256.851 | 257.120 | 257.514 | 256.912 | --- | --- | 7 |
| 8 | --- | --- | --- | 256.994 | 257.730 | 257.418 | 256.874 | 256.990 | 257.587 | 256.978 | --- | --- | 8 |
| 9 | --- | --- | --- | 257.000 | 257.858 | 257.427 | 256.858 | 256.844 | 257.721 | 257.048 | --- | --- | 9 |
| 10 | --- | --- | --- | 257.038 | 257.833 | 257.378 | 257.031 | 256.848 | 257.736 | 257.033 | --- | --- | 10 |
| 11 | --- | --- | --- | 257.078 | 257.844 | 257.384 | 256.898 | 256.947 | 257.708 | 256.831 | --- | --- | 11 |
| 12 | --- | --- | --- | 257.133 | 257.850 | 257.183 | 256.827 | 257.104 | 257.631 | 256.851 | --- | --- | 12 |
| 13 | --- | --- | --- | 257.184 | 257.838 | 257.081 | 256.887 | 257.238 | 257.550 | 256.844 | --- | --- | 13 |
| 14 | --- | --- | --- | 257.218 | 257.801 | 256.952 | 256.863 | 257.227 | 257.521 | 256.884 | --- | --- | 14 |
| 15 | --- | --- | --- | 257.310 | 257.832 | 256.880 | 256.783 | 257.063 | 257.710 | 256.851 | --- | --- | 15 |
| 16 | --- | --- | --- | 257.377 | 257.442 | 256.801 | 256.702 | 256.978 | 257.725 | 256.905 | --- | --- | 16 |
| 17 | --- | --- | --- | 257.430 | 257.420 | 256.841 | 256.862 | 257.011 | 257.738 | 256.928 | --- | --- | 17 |
| 18 | --- | --- | --- | 257.463 | 257.408 | 256.884 | 256.713 | 257.048 | 257.742 | 256.883 | --- | --- | 18 |
| 19 | --- | --- | --- | 257.441 | 257.400 | 256.807 | 256.809 | 257.186 | 257.720 | 256.795 | --- | --- | 19 |
| 20 | --- | --- | --- | 257.758 | 257.388 | 256.704 | 256.878 | 257.288 | 257.676 | 256.773 | --- | --- | 20 |
| 21 | --- | --- | --- | 257.893 | 257.378 | 256.830 | 256.952 | 257.238 | 257.644 | 256.844 | --- | --- | 21 |
| 22 | --- | --- | 257.188A | 258.041 | 257.240 | 256.811 | 257.030 | 257.239 | 257.628 | 256.880 | --- | --- | 22 |
| 23 | --- | --- | 257.183 | 258.200 | 257.142 | 256.585 | 257.061 | 257.328 | 257.641 | 256.922 | --- | --- | 23 |
| 24 | --- | --- | 257.143 | 258.401 | 257.142 | 256.574 | 257.058 | 257.411 | 257.594 | 256.908 | --- | --- | 24 |
| 25 | --- | --- | 257.107 | 258.843 | 257.248 | 256.572 | 257.042 | 257.480 | 257.480 | 256.840 | --- | --- | 25 |
| 26 | --- | --- | 257.083 | 258.880 | 257.377 | 256.685 | 257.052 | 257.508 | 257.405 | 256.743 | --- | --- | 26 |
| 27 | --- | --- | 257.071 | 258.887 | 257.380 | 256.781 | 257.093 | 257.483 | 257.378 | 256.782 | --- | --- | 27 |
| 28 | --- | --- | 257.048 | 258.149 | 257.348 | 256.718 | 257.084 | 257.388 | 257.340 | 256.810 | --- | --- | 28 |
| 29 | --- | | 257.041 | 256.808 | 257.340 | 256.708 | 257.022 | 257.408 | 257.342 | 256.828 | --- | --- | 29 |
| 30 | --- | | 257.027 | 258.495 | 257.278 | 256.748 | 256.816 | 257.487 | 257.388 | 256.735 | --- | --- | 30 |
| 31 | --- | | 257.060 | | 257.248 | | 256.809 | 257.481 | | 256.726 | | --- | 31 |
| MEAN | --- | --- | --- | 257.844 | 257.580 | 256.988 | 256.813 | 257.171 | 257.581 | 256.934 | --- | --- | MEAN |
| MAX | --- | --- | --- | 258.148 | 258.288 | 257.427 | 257.084 | 257.508 | 257.748 | 257.432 | --- | --- | MAX |
| MIN | --- | --- | --- | 256.990 | 257.142 | 256.572 | 256.852 | 256.747 | 257.340 | 256.726 | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

TYPE OF GAUGE - RECORDING
LOCATION - LAT 53 49 30 N
LONG 101 19 30 W

A - MANUAL GAUGE

MAXIMUM DAILY, 258.148 ON APR 26
MINIMUM DAILY, 256.572 ON JUN 26
MAXIMUM INSTANTANEOUS,
258.248 AT 14:54 CST ON APR 26

DRAINAGE AREA,
2 350 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1974 ADJ.)

REMARKS - WATER LEVELS ARE AFFECTED BY HIGH STAGES ON THE SASKATCHEWAN RIVER

## BIRCH RIVER NEAR BIRCH RIVER - STATION NO. 05LE010

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.0848 | 0.1288 | 0.845 | 0.388 | 0.595 | 0.111 | 3.10 | 0.352 | --- | --- | 1 |
| 2 | --- | --- | 0.0888 | 0.1338 | 0.711 | 0.315 | 0.511 | 0.108 | 2.81 | 0.370 | --- | --- | 2 |
| 3 | --- | --- | 0.0949 | 0.1458 | 0.574 | 0.300 | 0.418 | 0.180 | 3.31 | 0.343 | --- | --- | 3 |
| 4 | --- | --- | 0.1028 | 0.2888 | 0.525 | 0.159 | 0.376 | 0.084 | 3.71 | 0.382 | --- | --- | 4 |
| 5 | --- | --- | 0.0988 | 0.2788 | 0.424 | 0.131 | 0.331 | 0.221 | 2.88 | 0.389 | --- | --- | 5 |
| 6 | --- | --- | 0.0848 | 0.2888 | 0.386 | 0.190 | 0.288 | 0.105 | 2.45 | 0.408 | --- | --- | 6 |
| 7 | --- | --- | 0.0838 | 0.2848 | 0.499 | 0.228 | 0.232 | 0.088 | 2.25 | 0.359 | --- | --- | 7 |
| 8 | --- | --- | 0.0803 | 0.2798 | 0.443 | 0.281 | 0.198 | 0.052 | 2.18 | 0.347 | --- | --- | 8 |
| 9 | --- | --- | 0.1228 | 0.2578 | 0.384 | 0.320 | 0.281 | 0.048 | 2.35 | 0.348 | --- | --- | 9 |
| 10 | --- | --- | 0.0988 | 0.2338 | 0.421 | 0.380 | 0.239 | 0.040 | 2.31 | 0.360 | --- | --- | 10 |
| 11 | --- | --- | 0.0878 | 0.2448 | 0.437 | 0.581 | 0.228 | 0.053 | 2.10 | 0.388 | --- | --- | 11 |
| 12 | --- | --- | 0.1018 | 0.2648 | 0.484 | 0.732 | 0.238 | 0.088 | 1.88 | 0.384 | --- | --- | 12 |
| 13 | --- | --- | 0.1068 | 0.3458 | 0.389 | 0.803 | 0.197 | 0.065 | 1.88 | 0.338 | --- | --- | 13 |
| 14 | --- | --- | 0.1048 | 0.4088 | 0.340 | 0.847 | 0.215 | 0.088 | 1.90 | 0.388 | --- | --- | 14 |
| 15 | --- | --- | 0.1028 | 0.4728 | 0.337 | 0.845 | 0.210 | 0.048 | 1.22 | 0.435 | --- | --- | 15 |
| 16 | --- | --- | 0.1018 | 0.4888 | 0.290 | 0.810 | 0.188 | 0.083 | 1.01 | 0.438 | --- | --- | 16 |
| 17 | --- | --- | 0.1008 | 0.4038 | 0.358 | 0.804 | 0.180 | 0.138 | 0.858 | 0.401 | --- | --- | 17 |
| 18 | --- | --- | 0.1008 | 0.3698 | 0.318 | 0.471 | 0.157 | 0.299 | 0.780 | 0.372 | --- | --- | 18 |
| 19 | --- | --- | 0.1128 | 0.3658 | 0.380 | 0.411 | 0.150 | 0.147 | 0.787 | 0.404 | --- | --- | 19 |
| 20 | --- | --- | 0.1118 | 0.3698 | 0.732 | 0.318 | 0.127 | 0.118 | 0.678 | 0.426 | --- | --- | 20 |
| 21 | --- | --- | 0.1118 | 0.4288 | 0.873 | 0.265 | 0.126 | 0.145 | 0.574 | 0.454 | --- | --- | 21 |
| 22 | --- | --- | 0.1088 | 0.8878 | 0.717 | 0.292 | 0.136 | 0.141 | 0.558 | 0.432 | --- | --- | 22 |
| 23 | --- | --- | 0.1088 | 1.25 B | 0.681 | 0.283 | 0.180 | 0.112 | 0.514 | 0.434 | --- | --- | 23 |
| 24 | --- | --- | 0.1088 | 1.77 B | 0.838 | 0.408 | 0.134 | 0.126 | 0.487 | 0.403 | --- | --- | 24 |
| 25 | --- | --- | 0.1208 | 2.40 | 1.85 | 0.388 | 0.141 | 0.741 | 0.447 | 0.391 | --- | --- | 25 |
| 26 | --- | --- | 0.1128 | 2.28 | 1.88 | 0.883 | 0.142 | 0.978 | 0.407 | 0.388 | --- | --- | 26 |
| 27 | --- | --- | 0.1088 | 1.88 | 1.57 | 0.830 | 0.138 | 0.885 | 0.383 | 0.685 | --- | --- | 27 |
| 28 | --- | --- | 0.1088 | 1.48 | 1.22 | 0.783 | 0.105 | 1.38 | 0.342 | 1.35 | --- | --- | 28 |
| 29 | --- | | 0.1058 | 1.18 | 0.956 | 0.719 | 0.185 | 4.23 | 0.328 | 1.31 B | --- | --- | 29 |
| 30 | --- | | 0.1108 | 0.940 | 0.711 | 0.800 | 0.184 | 4.31 | 0.275 | 1.12 B | --- | --- | 30 |
| 31 | --- | | 0.1188 | | 0.530 | | 0.118 | 3.72 | | 0.9758 | | --- | 31 |
| TOTAL | --- | --- | 3.235 | 20.337 | 21.084 | 13.385 | 5.848 | 18.814 | 41.858 | 15.426 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.104 | 0.678 | 0.679 | 0.446 | 0.231 | 0.607 | 1.38 | 0.498 | --- | --- | MEAN |
| MAX | --- | --- | 0.122 | 2.40 | 1.88 | 0.830 | 0.595 | 4.31 | 3.10 | 1.35 | --- | --- | MAX |
| MIN | --- | --- | 0.080 | 0.128 | 0.280 | 0.131 | 0.105 | 0.040 | 0.275 | 0.338 | --- | --- | MIN |

SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.575
MAXIMUM DAILY, 4.31 ON AUG 30
MINIMUM DAILY, 0.040 ON AUG 10
MAXIMUM INSTANTANEOUS,
5.38 AT 21:38 CST ON AUG 28

TYPE OF GAUGE - RECORDING
LOCATION - LAT 53 32 38 N
LONG 101 09 00 W
DRAINAGE AREA, 138 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 582 |
| FEB | --- | AUG | 1 830 |
| MAR | 280 | SEP | 3 900 |
| APR | 1 780 | OCT | 1 330 |
| MAY | 1 820 | NOV | --- |
| JUN | 1 160 | DEC | --- |

TOTAL DISCHARGE, 12 300 dam³

## BIRD RIVER AT OUTLET OF BIRD LAKE - STATION NO. 05PJ001

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 1.88 | 1.88 | 16.8 | 21.5 | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | 1.88 | 1.85 | 15.4 | 21.5 | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | 1.88 | 1.85 | 15.7 | 21.1 | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | 1.87 | 1.84 | 15.1 | 20.8 | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | 1.86 | 1.85 | 15.8 | 20.4 | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | 1.86 | 1.85 | 17.3 | 20.0 | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | 1.85 | 1.86 | 17.8 | 20.0 | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | 1.86 | 1.88 | 18.1 | 19.6 | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | 1.87 | 1.88 | 18.2 | 19.0 | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | 1.87 | 1.88 | 18.3 | 18.6 | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | 1.88 | 1.89 | 18.4 | 18.2 | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | 1.86 | 2.00 | 18.3 | 18.7 | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | 1.88 | 2.01 | 18.2 | 19.0 | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | 1.88 | 2.03 | 18.1 | 19.0 | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | 1.86 | 2.07 | 17.8 | 18.8 | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | 1.86 | 2.09 | 17.8 | 18.8 | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | 1.86 | 2.14 | 17.6 | 18.8 | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | 1.86 | 2.15 | 17.3 | 18.2 | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | 1.83 | 2.22 | 17.1 | 17.8 | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | 1.82 | 2.30 | 17.0 | 17.4 | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | 1.82 | 2.48 | 16.8 | 17.1 | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | 1.81 | 2.73 | 16.8 | 17.0 | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | 1.82 | 3.37 | 16.5 | 16.9 | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | 1.81 | 4.62 | 16.3 | 16.5 | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | 1.80 | 6.12 | 17.0 | 16.5 | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | 1.80 | 8.08 | 18.4 | 16.6 | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | 1.86 | 10.4 | 18.4 | 17.1 | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | 1.82 | 12.2 | 20.4 | 17.5 | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | 1.84 | 13.6 | 21.0 | 17.8 | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | 1.83 | 14.4 | 21.3 | 18.1 | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | 1.83 | | 21.5 | | --- | --- | | --- | | --- | 31 |
| TOTAL | --- | --- | 50.38 | 118.36 | 551.1 | 558.2 | --- | --- | --- | --- | --- | --- | TOTAL |
| MEAN | --- | --- | 1.85 | 3.88 | 17.8 | 18.6 | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | 1.88 | 14.4 | 21.5 | 21.5 | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | 1.80 | 1.84 | 16.8 | 16.5 | --- | --- | --- | --- | --- | --- | MIN |

SUMMARY FOR THE MONTHS MAR TO JUN

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 10.8
MAXIMUM DAILY, 21.5 ON MAY 31
MINIMUM DAILY, 1.80 ON MAR 29
MAXIMUM INSTANTANEOUS,
22.1 AT 19:04 CST ON JUN 1

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 27 46 N
LONG 95 24 50 W
DRAINAGE AREA, 1 040 km²

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | --- |
| FEB | --- | AUG | --- |
| MAR | 5 230 | SEP | --- |
| APR | 10 200 | OCT | --- |
| MAY | 47 800 | NOV | --- |
| JUN | 48 200 | DEC | --- |

TOTAL DISCHARGE, 111 000 dam³

## BIRDTAIL CREEK NEAR BIRTLE - STATION NO. 05ME003

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0.0068 | 0.586 | 0.413 | 0.288 | 0.008 | 0.001 | 0.001 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0.5328 | 0.486 | 0.360 | 0.266 | 0.006 | 0.001 | 0.001 | --- | --- | 2 |
| 3 | --- | --- | 0B | 1.85 B | 0.382 | 0.313 | 0.234 | 0.005 | 0.001 | 0.001 | --- | --- | 3 |
| 4 | --- | --- | 0B | 3.62 B | 0.286 | 0.278 | 0.186 | 0.004 | 0.001 | 0.001 | --- | --- | 4 |
| 5 | --- | --- | 0B | 3.86 B | 0.177 | 0.280 | 0.154 | 0.004 | 0.001 | 0.001 | --- | --- | 5 |
| 6 | --- | --- | 0B | 3.86 B | 0.128 | 0.240 | 0.138 | 0.003 | 0.001 | 0.001 | --- | --- | 6 |
| 7 | --- | --- | 0B | 4.33 B | 0.106 | 0.211 | 0.123 | 0.003 | 0.001 | 0.001 | --- | --- | 7 |
| 8 | --- | --- | 0B | 3.86 B | 0.120 | 0.181 | 0.118 | 0.003 | 0.001 | 0.001 | --- | --- | 8 |
| 9 | --- | --- | 0B | 3.00 B | 0.095 | 0.184 | 0.120 | 0.002 | 0.001 | 0.001 | --- | --- | 9 |
| 10 | --- | --- | 0B | 1.91 B | 0.075 | 0.278 | 0.120 | 0.002 | 0.001 | 0.001 | --- | --- | 10 |
| 11 | --- | --- | 0B | 1.17 B | 0.062 | 0.821 | 0.113 | 0.002 | 0.001 | 0.001 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.7038 | 0.048 | 0.762 | 0.107 | 0.002 | 0.001 | 0.001 | --- | --- | 12 |
| 13 | --- | --- | 0B | 1.02 B | 0.057 | 0.570 | 0.100 | 0.001 | 0.001 | 0.001 | --- | --- | 13 |
| 14 | --- | --- | 0B | 1.31 B | 0.071 | 2.60 | 0.082 | 0.001 | 0.001 | 0.001 | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.9848 | 0.051 | 3.42 | 0.067 | 0.001 | 0.001 | 0.001 | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.8818 | 0.058 | 3.94 | 0.057 | 0.001 | 0.001 | 0.001 | --- | --- | 16 |
| 17 | --- | --- | 0B | 1.29 B | 0.051 | 4.22 | 0.051 | 0.001 | 0.001 | 0.001 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.8828 | 0.053 | 3.97 | 0.044 | 0.001 | 0.001 | 0.001 | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.828 | 0.080 | 2.86 | 0.037 | 0.001 | 0.001 | 0.001A | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.826 | 0.141 | 2.02 | 0.031 | 0.001 | 0.001 | 0.001A | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.785 | 0.185 | 1.52 | 0.031 | 0.001 | 0.001 | 0.001 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.783 | 0.150 | 1.18 | 0.028 | 0.001 | 0.001 | 0.001 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.804 | 0.149 | 0.862 | 0.026 | 0.001 | 0.001 | 0.001 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.958 | 0.226 | 0.804 | 0.022 | 0.001 | 0.001 | 0.001 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.886 | 0.413 | 0.741 | 0.018 | 0.001 | 0.001 | 0.001 | --- | --- | 25 |
| 26 | --- | --- | 0B | 1.21 | 0.406 | 0.638 | 0.017 | 0.001 | 0.001 | 0.001 | --- | --- | 26 |
| 27 | --- | --- | 0B | 1.06 | 0.409 | 0.582 | 0.018 | 0.001 | 0.001 | 0.001 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.851 | 0.572 | 0.506 | 0.015 | 0.001 | 0.001 | 0.001 | --- | --- | 28 |
| 29 | --- | | 0B | 0.702 | 0.708 | 0.386 | 0.012 | 0.001 | 0.001 | 0.001 | --- | --- | 29 |
| 30 | --- | | 0B | 0.603 | 0.592 | 0.290 | 0.009 | 0.001 | 0.001 | 0.001 | --- | --- | 30 |
| 31 | --- | | 0B | | 0.491 | | 0.008 | 0.001 | | 0.001A | | --- | 31 |
| TOTAL | --- | --- | 0 | 45.120 | 7.563 | 35.933 | 2.651 | 0.080 | 0.030 | 0.031 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 1.50 | 0.244 | 1.20 | 0.085 | 0.002 | 0.001 | 0.001 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 4.33 | 0.708 | 4.22 | 0.288 | 0.008 | 0.001 | 0.001 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.006 | 0.051 | 0.184 | 0.008 | 0.001 | 0.001 | 0.001 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.373
MAXIMUM DAILY, 4.33B ON APR 7
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
5.068 AT 03:59 CST ON APR 7

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 31 50 N
LONG 100 57 00 W
DRAINAGE AREA, 1 120 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 228 |
| FEB | --- | AUG | 5.18 |
| MAR | 0 | SEP | 2.59 |
| APR | 3 900 | OCT | 2.68 |
| MAY | 653 | NOV | --- |
| JUN | 3 100 | DEC | --- |

TOTAL DISCHARGE, 7 890 dam³

## BLACK RIVER NEAR MANIGOTAGAN - STATION NO. 05RA002

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.2878 | 0.3108 | 0.2378 | 0.2088 | 11.4 | 6.75E | 5.38 | 0.951 | 0.131 | 0.037 | 0.144 | 0.1418 | 1 |
| 2 | 0.2908 | 0.3028 | 0.2388 | 0.2138 | 11.5 | 6.50E | 5.74 | 0.866 | 0.105 | 0.036 | 0.138 | 0.1388 | 2 |
| 3 | 0.2868 | 0.2888 | 0.2328 | 0.2488 | 11.6 | 6.13E | 5.17 | 1.07 | 0.091 | 0.036 | 0.138 | 0.1328 | 3 |
| 4 | 0.3028 | 0.2868 | 0.2298 | 0.267 | 11.7 | 7.80E | 4.72 | 1.35 | 0.082 | 0.036 | 0.1428 | 0.1268 | 4 |
| 5 | 0.3048 | 0.2848 | 0.2288 | 0.332 | 11.4 | 7.68E | 4.30 | 1.15 | 0.074 | 0.043 | 0.1468 | 0.1188 | 5 |
| 6 | 0.3028 | 0.2838 | 0.2378 | 0.346 | 11.4 | 7.41E | 4.10 | 0.822 | 0.071 | 0.047 | 0.1518 | 0.1158 | 6 |
| 7 | 0.3038 | 0.2868 | 0.2248 | 0.382 | 11.5 | 7.27E | 3.80 | 0.677 | 0.071 | 0.048 | 0.1588 | 0.1088 | 7 |
| 8 | 0.3028 | 0.3088 | 0.2248 | 0.369 | 11.4 A | 7.10E | 3.63 | 0.674 | 0.078 | 0.050 | 0.1688 | 0.1018 | 8 |
| 9 | 0.2848 | 0.3108 | 0.2288 | 0.371 | 11.4 E | 6.82E | 3.33 | 0.671 | 0.084 | 0.053 | 0.1818 | 0.1028 | 9 |
| 10 | 0.2868 | 0.3198 | 0.2248 | 0.373 | 11.3 E | 6.78E | 2.95 | 0.819 | 0.113 | 0.059 | 0.1948 | 0.1028 | 10 |
| 11 | 0.2868 | 0.3398 | 0.2238 | 0.372 | 11.1 E | 6.68E | 2.67 | 0.736 | 0.125 | 0.062 | 0.2038 | 0.1028 | 11 |
| 12 | 0.2918 | 0.3378 | 0.2248 | 0.374 | 10.8 E | 6.85A | 2.61 | 0.668 | 0.127 | 0.067 | 0.2008 | 0.0988 | 12 |
| 13 | 0.2868 | 0.3308 | 0.2238 | 0.402 | 10.3 E | 6.80 | 2.54 | 0.582 | 0.118 | 0.070 | 0.1868 | 0.0958 | 13 |
| 14 | 0.2908 | 0.3218 | 0.2188 | 0.439 | 9.70E | 6.61 | 2.62 | 0.478 | 0.106 | 0.077 | 0.1968 | 0.0938 | 14 |
| 15 | 0.3098 | 0.3168 | 0.2138 | 0.478 | 9.20E | 6.84 | 2.42 | 0.380 | 0.100 | 0.087 | 0.2048 | 0.0948 | 15 |
| 16 | 0.3128 | 0.2908 | 0.2128 | 0.553 | 8.68E | 6.82 | 2.32 | 0.351 | 0.100 | 0.104 | 0.2118 | 0.0928 | 16 |
| 17 | 0.3448 | 0.2728 | 0.2108 | 0.599 | 8.25E | 7.36 | 2.12 | 0.330 | 0.096 | 0.117 | 0.2138 | 0.0838 | 17 |
| 18 | 0.3488 | 0.2888 | 0.2108 | 0.691 | 8.71E | 7.06 | 2.03 | 0.329 | 0.084 | 0.126 | 0.2118 | 0.0838 | 18 |
| 19 | 0.3488 | 0.2678 | 0.2108 | 0.787 | 9.01E | 6.73 | 2.03 | 0.511 | 0.075 | 0.135 | 0.2068 | 0.0838 | 19 |
| 20 | 0.3628 | 0.2668 | 0.2108 | 0.885 | 9.09E | 6.18 | 1.87 | 0.641 | 0.068 | 0.148 | 0.2008 | 0.0828 | 20 |
| 21 | 0.3548 | 0.2898 | 0.2088 | 1.13 | 8.78E | 5.85 | 1.71 | 0.628 | 0.080 | 0.160 | 0.1938 | 0.0818 | 21 |
| 22 | 0.3528 | 0.2458 | 0.2088 | 1.83 | 8.38E | 7.07 | 1.69 | 0.481 | 0.053 | 0.158 | 0.1838 | 0.0788 | 22 |
| 23 | 0.3518 | 0.2398 | 0.2088 | 3.86 | 7.80E | 7.88 | 1.45 | 0.382 | 0.048 | 0.154 | 0.1888 | 0.0788 | 23 |
| 24 | 0.3398 | 0.2428 | 0.2088 | 6.36 | 7.62E | 7.86 | 1.35 | 0.313 | 0.044 | 0.151 | 0.1868 | 0.0788 | 24 |
| 25 | 0.3338 | 0.2438 | 0.2088 | 7.68 | 8.17E | 7.16 | 1.26 | 0.282 | 0.041 | 0.147 | 0.1818 | 0.0798 | 25 |
| 26 | 0.3328 | 0.2508 | 0.2088 | 8.68 | 8.43E | 7.25 | 1.20 | 0.282 | 0.040 | 0.158 | 0.1788 | 0.0838 | 26 |
| 27 | 0.3308 | 0.2528 | 0.2088 | 8.86 | 8.02E | 7.77 | 1.11 | 0.233 | 0.040 | 0.186 | 0.1898 | 0.0848 | 27 |
| 28 | 0.3278 | 0.2488 | 0.2068 | 10.8 | 8.83E | 7.84 | 1.01 | 0.196 | 0.038 | 0.184 | 0.1828 | 0.0838 | 28 |
| 29 | 0.3278 | | 0.2068 | 11.0 | 8.85E | 7.83 | 0.889 | 0.171 | 0.038 | 0.182 | 0.1818 | 0.0818 | 29 |
| 30 | 0.3228 | | 0.2058 | 11.1 | 8.49E | 7.00 | 1.05 | 0.159 | 0.038 | 0.180 | 0.1438 | 0.0798 | 30 |
| 31 | 0.3188 | | 0.2058 | | 8.10E | | 0.992 | 0.146 | | 0.183 | | 0.0788 | 31 |
| TOTAL | 9.848 | 8.008 | 6.712 | 81.288 | 307.39 | 228.84 | 81.181 | 16.028 | 2.342 | 3.180 | 5.338 | 2.984 | TOTAL |
| MEAN | 0.318 | 0.268 | 0.217 | 2.71 | 9.92 | 7.62 | 2.62 | 0.582 | 0.078 | 0.103 | 0.178 | 0.086 | MEAN |
| MAX | 0.354 | 0.338 | 0.237 | 11.1 | 11.7 | 8.61 | 6.36 | 1.36 | 0.127 | 0.186 | 0.212 | 0.141 | MAX |
| MIN | 0.288 | 0.239 | 0.205 | 0.206 | 7.62 | 5.85 | 0.889 | 0.146 | 0.038 | 0.036 | 0.138 | 0.078 | MIN |

### SUMMARY FOR THE YEAR 1988

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 2.08
MAXIMUM DAILY, 11.7 ON MAY 4
MINIMUM DAILY, 0.036 ON OCT 2
MAXIMUM INSTANTANEOUS,
11.8 AT 20:15 CST ON MAY 2

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 51 42 N
LONG 95 15 10 W
DRAINAGE AREA, 712 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATES
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 881 | JUL | 7 010 |
| FEB | 892 | AUG | 1 580 |
| MAR | 880 | SEP | 202 |
| APR | 7 030 | OCT | 275 |
| MAY | 28 800 | NOV | 481 |
| JUN | 19 800 | DEC | 268 |

TOTAL DISCHARGE, 85 000 dam³

## BLOODVEIN RIVER ABOVE BLOODVEIN BAY - STATION NO. 08RB003

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7.778 | 10.1 B | 10.5 B | 10.3 B | 26.6 | 99.9 | 147 | 61.1 | 52.3 | 33.7 | 26.1 | 18.08 | 1 |
| 2 | 7.688 | 9.688 | 10.5 B | 10.3 B | 26.9 | 97.4 | 140 | 59.5 | 51.1 | 33.0 | 24.7 | 18.08 | 2 |
| 3 | 7.748 | 9.658 | 10.5 B | 10.2 B | 27.1 | 94.7 | 134 | 60.0 | 49.3 | 32.5 | 24.0 | 18.38 | 3 |
| 4 | 7.788 | 9.428 | 10.5 B | 10.2 B | 27.1 | 91.7 | 128 | 58.1 | 47.9 | 32.0 | 24.0 | 18.18 | 4 |
| 5 | 7.838 | 9.138 | 10.4 B | 10.3 B | 27.3 | 90.6 | 123 | 52.6 | 47.1 | 31.9 | 23.7 | 17.88 | 5 |
| 6 | 7.838 | 9.348 | 10.0 B | 10.2 B | 27.3 | 88.7 | 119 | 53.1 | 46.5 | 32.7 | 23.4 | 18.08 | 6 |
| 7 | 7.888 | 9.258 | 10.2 B | 10.3 B | 27.1 | 88.0 | 116 | 56.2 | 46.6 | 32.7 | 23.4 | 17.58 | 7 |
| 8 | 7.908 | 9.338 | 9.888 | 10.2 B | 26.8 | 88.8 | 114 | 53.5 | 46.6 | 32.8 | 23.58 | 17.08 | 8 |
| 9 | 7.818 | 8.748 | 9.958 | 10.1 B | 26.6 | 84.9 | 112 | 58.8 | 50.7 | 32.2 | 23.98 | 16.88 | 9 |
| 10 | 7.788 | 10.0 B | 10.6 B | 9.868 | 26.0 | 84.0 | 108 | 55.4 | 54.1 | 31.9 | 24.28 | 16.78 | 10 |
| 11 | 7.838 | 10.1 B | 11.4 B | 9.628 | 25.8 | 82.4 | 106 | 53.0 | 57.2 | 31.4 | 24.88 | 16.48 | 11 |
| 12 | 7.888 | 10.1 B | 11.4 B | 9.448 | 25.6 | 88.9 | 102 | 78.8 | 57.8 | 30.8 | 24.88 | 15.88 | 12 |
| 13 | 8.078 | 10.4 B | 11.4 B | 9.278 | 25.2 | 106 | 101 | 75.1 | 56.2 | 30.1 | 24.88 | 15.78 | 13 |
| 14 | 8.308 | 10.6 B | 11.4 B | 9.388 | 25.0 | 115 | 98.8 | 76.0 | 54.2 | 29.8 | 24.68 | 15.38 | 14 |
| 15 | 8.488 | 10.2 B | 11.1 B | 9.438 | 24.6 | 114 | 98.4 | 75.0 | 52.4 | 28.3 | 24.78 | 15.08 | 15 |
| 16 | 8.618 | 10.2 B | 11.0 B | 9.788 | 24.8 | 111 | 95.4 | 71.0 | 50.1 | 28.8 | 24.38 | 14.88 | 16 |
| 17 | 8.848 | 10.1 B | 10.8 B | 9.838 | 24.3 | 106 | 92.8 | 67.8 | 48.2 | 28.3 | 23.88 | 14.68 | 17 |
| 18 | 8.888 | 10.0 B | 10.8 B | 9.888 | 25.4 | 107 | 90.8 | 64.1 | 46.6 | 27.8 | 22.48 | 14.98 | 18 |
| 19 | 8.338 | 9.938 | 10.3 B | 9.928 | 24.3 | 108 | 88.7 | 63.1 | 45.0 | 27.2 | 23.08 | 14.78 | 19 |
| 20 | 8.478 | 9.888 | 10.3 B | 10.0 B | 24.8 | 105 | 86.3 | 64.2 | 43.6 | 26.7 | 22.88 | 14.58 | 20 |
| 21 | 8.608 | 9.888 | 10.4 B | 10.3 B | 42.0 | 102 | 84.7 | 64.1 | 42.8 | 25.8 | 22.78 | 14.58 | 21 |
| 22 | 8.698 | 9.478 | 10.4 B | 11.3 B | 46.0 | 102 | 82.0 | 65.0 | 42.7 | 25.2 | 22.18 | 14.18 | 22 |
| 23 | 8.888 | 9.308 | 10.1 B | 14.9 B | 48.4 | 99.6 | 78.7 | 65.6 | 41.1 | 24.7 | 21.68 | 14.08 | 23 |
| 24 | 8.628 | 9.508 | 10.1 B | 19.6 B | 46.6 | 98.2 | 76.6 | 64.6 | 38.8 | 24.3 | 21.08 | 13.88 | 24 |
| 25 | 8.898 | 8.858 | 10.2 B | 22.8 | 48.2 | 103 | 74.2 | 62.9 | 40.2 | 24.0 | 20.78 | 14.28 | 25 |
| 26 | 8.888 | 8.888 | 10.3 B | 23.8 | 72.0 | 111 | 71.8 | 61.4 | 38.9 | 23.6 | 20.48 | 14.38 | 26 |
| 27 | 8.738 | 10.2 B | 10.8 B | 25.1 | 84.7 | 136 | 69.3 | 58.6 | 37.4 | 23.6 | 20.18 | 14.38 | 27 |
| 28 | 8.788 | 10.5 B | 10.4 B | 25.6 | 104 | 164 | 67.1 | 58.1 | 36.6 | 23.8 | 19.88 | 14.58 | 28 |
| 29 | 8.838 | | 10.4 B | 25.6 | 108 | 163 | 65.3 | 54.4 | 35.4 | 24.5 | 19.68 | 14.78 | 29 |
| 30 | 10.1 B | | 10.4 B | 26.2 | 108 | 152 | 64.2 | 53.4 | 34.6 | 25.1 | 19.18 | 14.88 | 30 |
| 31 | 10.2 B | | 10.3 B | | 102 | | 62.6 | 53.4 | | 25.2 | | 14.48 | 31 |
| TOTAL | 271.73 | 276.31 | 326.83 | 403.53 | 1 344.0 | 3 187.4 | 2 885.3 | 2 172.8 | 1 384.7 | 885.3 | 686.0 | 487.8 | TOTAL |
| MEAN | 8.77 | 9.83 | 10.5 | 13.5 | 43.4 | 106 | 86.6 | 70.1 | 46.5 | 28.6 | 22.9 | 15.7 | MEAN |
| MAX | 10.2 | 10.6 | 11.4 | 26.2 | 108 | 164 | 147 | 88.2 | 57.8 | 33.7 | 26.1 | 19.0 | MAX |
| MIN | 7.74 | 8.13 | 9.86 | 9.38 | 24.3 | 82.4 | 62.6 | 53.4 | 34.6 | 23.8 | 19.1 | 13.8 | MIN |

SUMMARY FOR THE YEAR 1988

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 39.5
MAXIMUM DAILY, 164 ON JUN 28
MINIMUM DAILY, 7.748 ON JAN 3
MAXIMUM INSTANTANEOUS,
164 AT 10:35 CST ON JUN 28

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 42 52 N
LONG 96 36 44 W
DRAINAGE AREA, 9 050 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 23 500 | JUL | 269 000 |
| FEB | 23 800 | AUG | 186 000 |
| MAR | 28 200 | SEP | 121 000 |
| APR | 34 900 | OCT | 76 500 |
| MAY | 116 000 | NOV | 59 400 |
| JUN | 274 000 | DEC | 42 100 |

TOTAL DISCHARGE, 1 250 000 dam³

## BOGGY CREEK ABOVE LAKE IRWIN - STATION NO. 05LL013

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.1488 | 0.2598 | 0.278E | 0.104 | 0.183 | 0.084 | 0.058 | 0.040 | --- | --- | 1 |
| 2 | --- | --- | 0.1468 | 0.2628 | 0.103 | 0.103 | 0.137 | 0.084 | 0.050 | 0.040 | --- | --- | 2 |
| 3 | --- | --- | 0.1478 | 0.7698 | 0.234E | 0.093 | 0.113 | 0.084 | 0.048 | 0.040 | --- | --- | 3 |
| 4 | --- | --- | 0.1518 | 0.7158 | 0.230E | 0.091 | 0.092 | 0.083 | 0.050 | 0.039 | --- | --- | 4 |
| 5 | --- | --- | 0.1518 | 0.8498 | 0.212E | 0.094 | 0.083 | 0.083 | 0.050 | 0.040 | --- | --- | 5 |
| 6 | --- | --- | 0.1528 | 0.7888 | 0.180E | 0.095 | 0.070 | 0.081 | 0.048 | 0.040 | --- | --- | 6 |
| 7 | --- | --- | 0.1508 | 0.7618 | 0.167E | 0.107 | 0.058 | 0.059 | 0.048 | 0.042 | --- | --- | 7 |
| 8 | --- | --- | 0.1498 | 0.5968 | 0.171A | 0.121 | 0.055 | 0.058 | 0.048 | 0.048 | --- | --- | 8 |
| 9 | --- | --- | 0.1488 | 0.4938 | 0.184 | 0.121 | 0.058 | 0.057 | 0.047 | 0.051 | --- | --- | 9 |
| 10 | --- | --- | 0.1468 | 0.3858 | 0.170 | 0.108 | 0.063 | 0.055 | 0.045 | 0.058 | --- | --- | 10 |
| 11 | --- | --- | 0.1468 | 0.4288 | 0.180 | 0.102 | 0.049 | 0.053 | 0.045 | 0.088 | --- | --- | 11 |
| 12 | --- | --- | 0.1448 | 0.4688 | 0.173 | 0.180 | 0.048 | 0.053 | 0.044 | 0.075 | --- | --- | 12 |
| 13 | --- | --- | 0.1418 | 0.4808 | 0.176 | 0.327 | 0.049 | 0.056 | 0.043 | 0.082 | --- | --- | 13 |
| 14 | --- | --- | 0.1368 | 0.504 | 0.178 | 0.337 | 0.051 | 0.058 | 0.042 | 0.087 | --- | --- | 14 |
| 15 | --- | --- | 0.1368 | 0.539 | 0.177 | 0.268 | 0.050 | 0.054 | 0.042 | 0.090 | --- | --- | 15 |
| 16 | --- | --- | 0.1338 | 0.543 | 0.180 | 0.205 | 0.048 | 0.052 | 0.041 | 0.085 | --- | --- | 16 |
| 17 | --- | --- | 0.1348 | 0.594 | 0.187 | 0.172 | 0.043 | 0.052 | 0.040 | 0.101 | --- | --- | 17 |
| 18 | --- | --- | 0.1388 | 0.486 | 0.188 | 0.158 | 0.041 | 0.052 | 0.039 | 0.101 | --- | --- | 18 |
| 19 | --- | --- | 0.1388 | 0.410 | 0.184 | 0.144 | 0.041 | 0.051 | 0.039 | 0.099 | --- | --- | 19 |
| 20 | --- | --- | 0.1398 | 0.405 | 0.178 | 0.128 | 0.048 | 0.052 | 0.040 | 0.098 | --- | --- | 20 |
| 21 | --- | --- | 0.1408 | 0.357 | 0.185 | 0.120 | 0.052 | 0.052 | 0.040 | 0.102 | --- | --- | 21 |
| 22 | --- | --- | 0.1428 | 0.356 | 0.190 | 0.117 | 0.052 | 0.052 | 0.040 | 0.105 | --- | --- | 22 |
| 23 | --- | --- | 0.1448 | 0.338 | 0.143 | 0.112 | 0.054 | 0.052 | 0.040 | 0.108 | --- | --- | 23 |
| 24 | --- | --- | 0.1468 | 0.377 | 0.139 | 0.107 | 0.056 | 0.052 | 0.040 | 0.111 | --- | --- | 24 |
| 25 | --- | --- | 0.1528 | 0.432 | 0.128 | 0.103 | 0.058 | 0.051 | 0.040 | 0.111 | --- | --- | 25 |
| 26 | --- | --- | 0.1538 | 0.387 | 0.130 | 0.102 | 0.062 | 0.050 | 0.038 | 0.112 | --- | --- | 26 |
| 27 | --- | --- | 0.1538 | 0.381A | 0.127 | 0.103 | 0.063 | 0.049 | 0.040 | 0.116 | --- | --- | 27 |
| 28 | --- | --- | 0.1548 | 0.339E | 0.120 | 0.107 | 0.063 | 0.051 | 0.041 | 0.114 | --- | --- | 28 |
| 29 | --- | | 0.1558 | 0.337E | 0.116 | 0.176 | 0.063 | 0.052 | 0.040 | 0.112 | --- | --- | 29 |
| 30 | --- | | 0.1568 | 0.304E | 0.111 | 0.188 | 0.062 | 0.051 | 0.040 | 0.112 | --- | --- | 30 |
| 31 | --- | | 0.1568 | | 0.108 | | 0.062 | 0.050 | | 0.112 | | --- | 31 |
| TOTAL | --- | --- | 4.830 | 14.438 | 5.304 | 4.318 | 1.898 | 1.701 | 1.307 | 2.948 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.148 | 0.481 | 0.171 | 0.144 | 0.064 | 0.055 | 0.044 | 0.082 | --- | --- | MEAN |
| MAX | --- | --- | 0.158 | 0.849 | 0.278 | 0.337 | 0.183 | 0.084 | 0.058 | 0.116 | --- | --- | MAX |
| MIN | --- | --- | 0.133 | 0.359 | 0.108 | 0.081 | 0.041 | 0.049 | 0.038 | 0.039 | --- | --- | MIN |

SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.147
MAXIMUM DAILY, 0.8498 ON APR 5
MINIMUM DAILY, 0.038 ON SEP 18

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 10 54 N
LONG 99 23 56 W
DRAINAGE AREA, 918 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 173 |
| FEB | --- | AUG | 147 |
| MAR | 381 | SEP | 113 |
| APR | 1 250 | OCT | 220 |
| MAY | 458 | NOV | --- |
| JUN | 373 | DEC | --- |

TOTAL DISCHARGE, 3 130 dam³

REMARKS - PREVIOUS TO 1984 PUBLISHED UNDER THE NAME "WHITEMUD RIVER ABOVE NEEPAWA RESERVOIR"

## BOGGY CREEK NEAR NEEPAWA - STATION NO. 05LL011

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.1298 | 0.1388 | 0.169 | 0.121 | 0.151 | 0.1198E | 0.198 | 0.207 | --- | --- | 1 |
| 2 | --- | --- | 0.1298 | 0.1378 | 0.177 | 0.158 | 0.148 | 0.1198E | 0.182 | 0.198 | --- | --- | 2 |
| 3 | --- | --- | 0.1288 | 0.1498A | 0.156 | 0.113 | 0.137 | 0.1198E | 0.188 | 0.201 | --- | --- | 3 |
| 4 | --- | --- | 0.1298 | 0.4448A | 0.183 | 0.123 | 0.121 | 0.1198E | 0.188 | 0.207 | --- | --- | 4 |
| 5 | --- | --- | 0.1298 | 0.844 | 0.072 | 0.113 | 0.132 | 0.1118 | 0.181 | 0.218 | --- | --- | 5 |
| 6 | --- | --- | 0.1328 | 0.382 | 0.042 | 0.118 | 0.121 | 0.1118 | 0.188 | 0.206 | --- | --- | 6 |
| 7 | --- | --- | 0.1328 | 0.277 | 0.081 | 0.151 | 0.120 | 0.1118 | 0.187 | 0.208 | --- | --- | 7 |
| 8 | --- | --- | 0.1388 | 0.211 | 0.100 | 0.128 | 0.138 | 0.1118 | 0.178 | 0.207 | --- | --- | 8 |
| 9 | --- | --- | 0.1358 | 0.178 | 0.113 | 0.118 | 0.148 | 0.1118 | 0.175 | 0.218 | --- | --- | 9 |
| 10 | --- | --- | 0.1378 | 0.184 | 0.178 | 0.114 | 0.138 | 0.1118 | 0.178 | 0.206 | --- | --- | 10 |
| 11 | --- | --- | 0.1358 | 0.147 | 0.282 | 0.133 | 0.134 | 0.1088E | 0.178 | 0.211 | --- | --- | 11 |
| 12 | --- | --- | 0.1328 | 0.152 | 0.190 | 0.241 | 0.281 | 0.1378E | 0.181 | 0.216 | --- | --- | 12 |
| 13 | --- | --- | 0.1288 | 0.171 | 0.184 | 0.358 | 0.174 | 0.2148E | 0.181 | 0.193 | --- | --- | 13 |
| 14 | --- | --- | 0.1278 | 0.185 | 0.184 | 0.478 | 0.154 | 0.2238E | 0.175 | 0.181 | --- | --- | 14 |
| 15 | --- | --- | 0.1218 | 0.188 | 0.152 | 0.575 | 0.141 | 0.207A | 0.181 | 0.192 | --- | --- | 15 |
| 16 | --- | --- | 0.1188 | 0.188 | 0.185 | 0.537 | 0.130 | 0.202 | 0.170 | 0.180 | --- | --- | 16 |
| 17 | --- | --- | 0.1188 | 0.185 | 0.178 | 0.527 | 0.133 | 0.208 | 0.187 | 0.184 | --- | --- | 17 |
| 18 | --- | --- | 0.1188 | 0.132 | 0.182 | 0.441 | 0.127 | 0.241 | 0.178 | 0.181 | --- | --- | 18 |
| 19 | --- | --- | 0.1218 | 0.126 | 0.185 | 0.387 | 0.127 | 0.212 | 0.180 | 0.188 | --- | --- | 19 |
| 20 | --- | --- | 0.1248 | 0.142 | 0.177 | 0.281 | 0.121 | 0.209 | 0.184 | 0.188 | --- | --- | 20 |
| 21 | --- | --- | 0.1278 | 0.180 | 0.165 | 0.188 | 0.118 | 0.218 | 0.187 | 0.188 | --- | --- | 21 |
| 22 | --- | --- | 0.1278 | 0.238 | 0.147 | 0.157 | 0.116 | 0.213 | 0.182 | 0.203 | --- | --- | 22 |
| 23 | --- | --- | 0.1288 | 0.275 | 0.188 | 0.132 | 0.119A | 0.208 | 0.181 | 0.200 | --- | --- | 23 |
| 24 | --- | --- | 0.1328 | 0.344 | 0.188 | 0.110 | 0.119E | 0.211 | 0.186 | 0.187 | --- | --- | 24 |
| 25 | --- | --- | 0.1368 | 0.383 | 0.188 | 0.103 | 0.121E | 0.223 | 0.187 | 0.204 | --- | --- | 25 |
| 26 | --- | --- | 0.1378 | 0.350 | 0.176 | 0.108 | 0.119E | 0.210 | 0.187 | 0.218 | --- | --- | 26 |
| 27 | --- | --- | 0.1378 | 0.311 | 0.180 | 0.108 | 0.121E | 0.188 | 0.188 | 0.220 | --- | --- | 27 |
| 28 | --- | --- | 0.1368 | 0.265 | 0.172 | 0.108 | 0.118E | 0.219 | 0.184 | 0.210 | --- | --- | 28 |
| 29 | --- | | 0.1368 | 0.212 | 0.152 | 0.137 | 0.119E | 0.223 | 0.188 | 0.210 | --- | --- | 29 |
| 30 | --- | | 0.1338 | 0.187 | 0.087 | 0.135 | 0.118E | 0.210 | 0.188 | 0.210 | --- | --- | 30 |
| 31 | --- | | 0.1328 | | 0.096 | | 0.118E | 0.210 | | 0.208 | | --- | 31 |
| TOTAL | --- | --- | 4.017 | 5.918 | 4.718 | 5.448 | 4.178 | 5.442 | 5.552 | 6.313 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.130 | 0.231 | 0.152 | 0.215 | 0.135 | 0.176 | 0.185 | 0.204 | --- | --- | MEAN |
| MAX | --- | --- | 0.137 | 0.844 | 0.282 | 0.575 | 0.281 | 0.241 | 0.188 | 0.220 | --- | --- | MAX |
| MIN | --- | --- | 0.116 | 0.126 | 0.042 | 0.103 | 0.116 | 0.108 | 0.187 | 0.180 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.178
MAXIMUM DAILY, 0.575 ON JUN 15
MINIMUM DAILY, 0.042 ON MAY 8
MAXIMUM INSTANTANEOUS,
0.580 AT 20:45 CST ON APR 4

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 13 34 N
LONG 99 27 17 W
DRAINAGE AREA, 854 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
REGULATED SINCE 1980

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 281 |
| FEB | --- | AUG | 470 |
| MAR | 347 | SEP | 480 |
| APR | 588 | OCT | 545 |
| MAY | 408 | NOV | --- |
| JUN | 567 | DEC | --- |

TOTAL DISCHARGE, 3 770 dam³

REMARKS - PREVIOUS TO 1988 PUBLISHED UNDER THE NAME "WHITEMUD RIVER NEAR NEEPAWA"

## BOISSEVAIN RESERVOIR NEAR BOISSEVAIN - STATION NO. 05DA801

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | 515.373E | --- | 517.278E | 517.488E | --- | 517.323 | 517.088E | 516.888E | 516.758 | 516.667E | 516.828E | 1 |
| 2 | 515.463 | 515.388E | --- | 517.278E | 517.488 | --- | 517.314E | 517.087 | 516.884E | 516.758E | 516.664 | 516.827 | 2 |
| 3 | 515.458E | 515.385E | --- | 517.278 | 517.462E | --- | 517.307 | 517.083E | 516.880 | 516.743 | 516.657E | 516.824E | 3 |
| 4 | 515.463 | 515.381E | --- | 517.352 | 517.474 | --- | 517.304E | 517.078 | --- | 516.743E | 516.880 | 516.821 | 4 |
| 5 | 515.458E | 515.367E | --- | 517.403E | 517.487E | --- | 517.300 | 517.088E | --- | 516.743 | 516.858E | 516.818E | 5 |
| 6 | 515.447 | 515.354E | --- | 517.453 | 517.488 | --- | 517.288E | 517.038 | --- | 516.738E | 516.880 | 516.812 | 6 |
| 7 | 515.448E | 515.350 | --- | 517.471E | 517.458E | 517.388 | 517.281 | 517.032E | --- | 516.727 | 516.880E | 516.812E | 7 |
| 8 | 515.480 | 515.348E | --- | 517.488 | 517.458 | --- | 517.288E | 517.026 | --- | 516.725E | 516.880 | 516.812 | 8 |
| 9 | 515.448E | 515.340E | --- | 517.488E | 517.458E | --- | 517.264E | 517.017E | 516.885 | 516.722E | 516.858E | 516.808E | 9 |
| 10 | 515.447 | 515.338E | --- | 517.488 | 517.453 | --- | 517.240E | 517.008 | 516.885E | 516.719E | 516.851 | 516.808 | 10 |
| 11 | 515.444E | 515.330E | --- | 517.482E | 517.448E | --- | 517.278 | 517.003E | 516.885 | 516.717E | 516.851E | 516.801E | 11 |
| 12 | 515.441 | 515.325E | --- | 517.486 | 517.444 | --- | 517.278E | 516.998 | 516.880E | 516.714E | 516.851 | 516.798 | 12 |
| 13 | 515.437E | 515.320E | 515.488 | 517.500E | 517.444E | 517.388 | 517.278 | 516.998E | 516.888 | 516.711E | 516.844E | 516.798E | 13 |
| 14 | 515.432 | 515.315E | 515.488E | 517.505 | 517.444 | 517.388E | 517.288E | 516.998 | 516.882E | 516.708E | 516.838 | 516.795 | 14 |
| 15 | 515.427E | 515.310 | 515.473 | 517.505E | 517.438E | 517.388 | 517.243E | 516.991E | 516.849 | 516.705 | 516.838E | 516.798E | 15 |
| 16 | 515.423 | 515.307E | 515.472E | 517.505 | 517.428 | 517.388E | 517.228E | 516.987 | 516.849E | 516.703E | 516.838 | 516.888 | 16 |
| 17 | 515.423E | 515.304E | 515.472 | 517.500E | 517.438E | 517.392 | 517.208 | 516.983E | 516.849 | 516.697 | 516.838E | 516.888E | 17 |
| 18 | 515.423 | 515.301E | 515.472E | 517.495 | 517.444 | 517.383E | 517.203E | 516.980 | 516.843E | 516.692E | 516.838 | 516.888 | 18 |
| 19 | 515.420E | 515.298E | 515.472 | 517.495E | 517.444E | 517.374 | 517.187 | 516.972E | 516.837 | 516.688 | 516.838E | 516.883E | 19 |
| 20 | 515.417 | 515.295E | 515.472E | 517.488 | 517.444 | 517.368E | 517.181E | 516.965 | 516.828E | 516.688E | 516.842 | 516.880 | 20 |
| 21 | 515.413E | 515.283 | 515.472 | 517.484E | 517.428E | 517.361 | 517.185 | 516.958E | 516.818 | 516.688 | 516.838E | 516.880E | 21 |
| 22 | 515.408E | --- | 515.475E | 517.482 | 517.413 | 517.358E | 517.172E | 516.947 | 516.813E | 516.685E | 516.836 | 516.880 | 22 |
| 23 | 515.408E | --- | 515.474 | 517.478E | 517.413E | 517.355 | 517.180 | 516.944E | 516.807 | 516.682 | 516.838E | 516.867E | 23 |
| 24 | 515.401E | --- | 515.474E | 517.488 | 517.422 | 517.348E | 517.150Z | 516.941 | 516.788E | 516.674E | 516.836 | 516.884 | 24 |
| 25 | 515.397E | --- | 515.830 | 517.502E | 517.422E | 517.337 | 517.139 | 516.933E | 516.788 | 516.667 | 516.838E | 516.884E | 25 |
| 26 | 515.392 | --- | 515.886 | 517.505 | 517.422 | 517.328E | 517.131E | 516.926 | 516.782E | 516.667E | 516.838 | 516.884 | 26 |
| 27 | 515.388E | --- | 515.847 | 517.492 | 517.418E | 517.332 | 517.124 | 516.918E | 516.778 | 516.667 | 516.833E | 516.880E | 27 |
| 28 | 515.383 | --- | 515.803E | 517.488 | 517.413 | 517.322E | 517.124E | 516.910 | 516.770E | 516.663E | 516.830 | 516.876 | 28 |
| 29 | 515.382E | | 515.880 | 517.488E | --- | 517.322 | 517.124 | 516.903E | 516.784 | 516.880 | 516.830E | 516.875E | 29 |
| 30 | 515.380 | | 515.880E | 517.488 | --- | 517.322E | 517.115E | 516.898 | 516.781E | 516.880E | 516.830 | 516.875 | 30 |
| 31 | 515.378E | | 515.880 | | --- | | 517.105 | 516.891E | | 516.880 | | --- | 31 |
| MEAN | --- | --- | --- | 517.484 | --- | --- | 517.232 | 516.986 | --- | 516.702 | 516.844 | --- | MEAN |
| MAX | --- | --- | --- | 517.505 | --- | --- | 517.332 | 517.098 | --- | 516.758 | 516.880 | --- | MAX |
| MIN | --- | --- | --- | 517.278 | --- | --- | 517.105 | 516.891 | --- | 516.880 | 516.830 | --- | MIN |

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 13 48 N
LONG 100 01 53 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED
REGULATED
DRAINAGE AREA,
48.7 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## BOYNE RIVER ABOVE CARMAN DAM - STATION NO. 05OF001

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 282.777 | 282.688E | 282.670E | 282.679 | 282.534E | 282.618E | 282.578 | 282.688E | 1 |
| 2 | --- | --- | --- | --- | 282.747E | 282.693E | 282.685E | 282.684E | 282.528 | 282.618 | 282.578E | 282.686 | 2 |
| 3 | --- | --- | --- | --- | 282.717 | 282.688 | 282.680 | 282.629 | 282.618E | 282.618E | 282.578E | 282.686E | 3 |
| 4 | --- | --- | --- | --- | 282.684E | 282.684E | 282.685E | 282.684E | 282.608 | 282.618 | 282.678 | 282.686 | 4 |
| 5 | --- | --- | --- | --- | 282.660E | 282.688 | 282.680 | 282.679 | 282.623E | 282.626E | 282.693E | 282.686E | 5 |
| 6 | --- | --- | --- | 282.684 | 282.617 | 282.688E | 282.680E | 282.688E | 282.528 | 282.631E | 282.608 | 282.686 | 6 |
| 7 | --- | --- | --- | 282.686 | 282.617E | 282.619 | 282.680 | 282.688 | 282.627E | 282.634 | 282.608E | 282.686E | 7 |
| 8 | --- | --- | --- | 282.688 | 282.617 | 282.628E | 282.685E | 282.644E | 282.631E | 282.638E | 282.608 | 282.686E | 8 |
| 9 | --- | --- | --- | 282.658E | 282.627E | 282.638E | 282.680E | 282.628 | 282.618 | 282.634E | 282.608E | 282.686 | 9 |
| 10 | --- | --- | --- | 282.686 | 282.637 | 282.648 | 282.680 | 282.612E | 282.613E | 282.631E | 282.608E | --- | 10 |
| 11 | --- | --- | --- | 282.608E | 282.661E | 282.648E | 282.680 | 282.388E | 282.608 | 282.629E | 282.608 | --- | 11 |
| 12 | --- | --- | --- | 282.666 | 282.664E | 282.648 | 282.680 | 282.378 | 282.603E | 282.627E | 282.608E | --- | 12 |
| 13 | --- | --- | --- | 282.738E | 282.676 | 282.648E | 282.683E | 282.378E | 282.586 | 282.628E | 282.608 | --- | 13 |
| 14 | --- | --- | --- | 282.618 | 282.673E | 282.648 | 282.667E | 282.378 | 282.583E | 282.622E | 282.608E | --- | 14 |
| 15 | --- | --- | --- | 282.688E | 282.683 | 282.648E | 282.680 | 282.378E | 282.588 | 282.620E | 282.686E | --- | 15 |
| 16 | --- | --- | --- | 282.922E | 282.683E | 282.648E | 282.680E | 282.378 | 282.588E | 282.618 | 282.608 | --- | 16 |
| 17 | --- | --- | --- | 282.878 | 282.666 | 282.648 | 282.680 | 282.478E | 282.588 | 282.613E | 282.608E | --- | 17 |
| 18 | --- | --- | --- | 282.817E | 282.656E | 282.648E | 282.680E | 282.678E | 282.588E | 282.606 | 282.606 | --- | 18 |
| 19 | --- | --- | --- | 282.657 | 282.651E | 282.648 | 282.680 | 282.678 | 282.588E | 282.601E | 282.608E | --- | 19 |
| 20 | --- | --- | --- | 282.687E | 282.648 | 282.648E | 282.667E | 282.668E | 282.588 | 282.598E | 282.606 | --- | 20 |
| 21 | --- | --- | --- | 282.677E | 282.643E | 282.648 | 282.683E | 282.658 | 282.588E | 282.588 | 282.603E | --- | 21 |
| 22 | --- | --- | --- | 282.667 | 282.638E | 282.648E | 282.680 | 282.643E | 282.661E | 282.587E | 282.598 | --- | 22 |
| 23 | --- | --- | --- | 282.687E | 282.633E | 282.648E | 282.635E | 282.628 | 282.578 | 282.588E | 282.598E | --- | 23 |
| 24 | --- | --- | --- | 282.667 | 282.628 | 282.648 | 282.619 | 282.618E | 282.578E | 282.585E | 282.598E | --- | 24 |
| 25 | --- | --- | --- | 282.672E | 282.625E | 282.648E | 282.614E | 282.601E | 282.578 | 282.584E | 282.588 | --- | 25 |
| 26 | --- | --- | --- | 282.657 | 282.621E | 282.648 | 282.609 | 282.588 | 282.583E | 282.583E | 282.598E | --- | 26 |
| 27 | --- | --- | --- | 282.637E | 282.618 | 282.658E | 282.602E | 282.583E | 282.588 | 282.581E | 282.586 | --- | 27 |
| 28 | --- | --- | --- | 282.617 | 282.613E | 282.680 | 282.598E | 282.578 | 282.588E | 282.580E | 282.598E | --- | 28 |
| 29 | --- | --- | --- | 282.606E | 282.608 | 282.685E | 282.589 | 282.583E | 282.608E | 282.578E | 282.598 | --- | 29 |
| 30 | --- | --- | --- | 282.780E | 282.603E | 282.670 | 282.588E | 282.548 | 282.618 | 282.578 | 282.598E | --- | 30 |
| 31 | --- | | --- | | 282.598 | | 282.588E | 282.541E | | 282.578E | | --- | 31 |
| MEAN | --- | --- | --- | --- | 282.648 | 282.636 | 282.641 | 282.619 | 282.578 | 282.606 | 282.600 | --- | MEAN |
| MAX | --- | --- | --- | --- | 282.777 | 282.670 | 282.670 | 282.578 | 282.618 | 282.638 | 282.608 | --- | MAX |
| MIN | --- | --- | --- | --- | 282.598 | 282.588 | 282.588 | 282.379 | 282.508 | 282.578 | 282.578 | --- | MIN |

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 30 17 N
LONG 98 01 03 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1941

DRAINAGE AREA,
1 100 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## BOYNE RIVER NEAR CARMAN - STATION NO. 05OF003

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.075B | 0.071B | 0.023B | 0.018B | 1.38 | 0.085 | 0.188 | 0.058 | 0.074 | 0.018 | 0.004B | 0.028B | 1 |
| 2 | 0.082B | 0.067B | 0.023B | 0.026B | 1.17 | 0.086 | 0.177 | 0.080 | 0.070 | 0.017 | 0.003B | 0.029B | 2 |
| 3 | 0.080B | 0.063B | 0.026B | 0.137B | 0.986 | 0.084 | 0.183A | 0.087 | 0.071 | 0.022 | 0.003B | 0.032B | 3 |
| 4 | 0.078B | 0.048B | 0.023B | 0.111B | 0.813 | 0.080 | 0.131E | 0.078 | 0.086 | 0.054 | 0.003B | 0.043B | 4 |
| 5 | 0.078B | 0.080B | 0.028B | 0.044B | 0.686 | 0.084 | 0.077A | 0.074 | 0.088 | 0.058 | 0.003B | 0.044B | 5 |
| 6 | 0.072B | 0.041B | 0.028B | 0.017B | 0.595 | 0.092 | 0.088 | 0.072 | 0.146 | 0.058 | 0.003B | 0.038B | 6 |
| 7 | 0.077B | 0.038B | 0.024B | 0.130B | 0.581 | 0.184 | 0.070 | 0.084 | 0.081 | 0.073 | 0.008B | 0.030B | 7 |
| 8 | 0.083B | 0.018B | 0.022B | 0.123B | 0.453 | 0.184 | 0.088 | 0.084 | 0.083 | 0.092 | 0.013B | 0.028B | 8 |
| 9 | 0.093B | 0.020B | 0.024B | 0.028B | 0.380 | 0.218 | 0.088 | 0.081 | 0.102 | 0.101 | 0.018B | 0.027B | 9 |
| 10 | 0.090B | 0.018B | 0.034B | 0.018B | 0.402 | 0.208 | 0.088 | 0.081 | 0.118 | 0.112 | 0.028B | 0.027B | 10 |
| 11 | 0.088B | 0.018B | 0.021B | 0.014B | 0.413 | 0.208 | 0.088 | 0.087 | 0.174 | 0.121 | 0.033B | 0.024B | 11 |
| 12 | 0.101B | 0.023B | 0.019B | 0.013B | 0.420 | 0.236 | 0.086 | 0.084 | 0.267 | 0.114 | 0.032B | 0.021B | 12 |
| 13 | 0.106B | 0.023B | 0.023B | 3.89 B | 0.380 | 0.306 | 0.043 | 0.083 | 0.138 | 0.117 | 0.042B | 0.017B | 13 |
| 14 | 0.111B | 0.021B | 0.020B | 3.31 B | 0.344 | 0.263 | 0.038 | 0.083 | 0.148 | 0.126 | 0.052B | 0.014B | 14 |
| 15 | 0.093B | 0.024B | 0.015B | 3.80 B | 0.328 | 0.241 | 0.047 | 0.082 | 0.188 | 0.133 | 0.049B | 0.012B | 15 |
| 16 | 0.088B | 0.044B | 0.018B | 7.23 B | 0.288 | 0.231 | 0.094 | 0.082 | 0.127 | 0.108 | 0.044B | 0.013B | 16 |
| 17 | 0.108B | 0.027B | 0.018B | 8.16 B | 0.252 | 0.218 | 0.080 | 0.082 | 0.088 | 0.088 | 0.040B | 0.011B | 17 |
| 18 | 0.097B | 0.018B | 0.024B | 11.1 B | 0.232 | 0.227 | 0.081 | 0.093 | 0.083 | 0.070 | 0.038B | 0.010B | 18 |
| 19 | 0.090B | 0.029B | 0.033B | 8.02 B | 0.202 | 0.218 | 0.081 | 0.078 | 0.051 | 0.088 | 0.039B | 0.009B | 19 |
| 20 | 0.083B | 0.038B | 0.041B | 5.72 B | 0.188 | 0.204 | 0.082 | 0.095 | 0.048 | 0.048 | 0.041B | 0.008B | 20 |
| 21 | 0.084B | 0.028B | 0.030B | 4.01 B | 0.178 | 0.182 | 0.088 | 0.102 | 0.040 | 0.037 | 0.040B | 0.008B | 21 |
| 22 | 0.093B | 0.028B | 0.055B | 5.43 B | 0.180 | 0.180 | 0.082 | 0.084 | 0.036 | 0.033 | 0.037B | 0.004B | 22 |
| 23 | 0.078B | 0.028B | 0.044B | 4.83 B | 0.188 | 0.172 | 0.080 | 0.084 | 0.031 | 0.035 | 0.037B | 0.004B | 23 |
| 24 | 0.062B | 0.027B | 0.025B | 4.31 | 0.181 | 0.173 | 0.051 | 0.084 | 0.029 | 0.020 | 0.037B | 0.008B | 24 |
| 25 | 0.088B | 0.028B | 0.018B | 4.14 | 0.188 | 0.211 | 0.081 | 0.090 | 0.028 | 0.018 | 0.034B | 0.008B | 25 |
| 26 | 0.084B | 0.024B | 0.018B | 3.88 | 0.118 | 0.220 | 0.080 | 0.083 | 0.024 | 0.013 | 0.032B | 0.004B | 26 |
| 27 | 0.088B | 0.027B | 0.028B | 3.34 | 0.098 | 0.209 | 0.080 | 0.084 | 0.023 | 0.011 | 0.028B | 0.003B | 27 |
| 28 | 0.084B | 0.026B | 0.032B | 2.78 | 0.072 | 0.173 | 0.080 | 0.081 | 0.023 | 0.008 | 0.028B | 0.003B | 28 |
| 29 | 0.083B | | 0.026B | 2.20 | 0.073 | 0.160 | 0.083 | 0.080 | 0.024 | 0.006 | 0.028B | 0.003B | 29 |
| 30 | 0.088B | | 0.017B | 1.72 | 0.071 | 0.220 | 0.085 | 0.084 | 0.020 | 0.005 | 0.028B | 0.003B | 30 |
| 31 | 0.073B | | 0.017B | | 0.084 | | 0.087 | 0.078 | | 0.005B | | 0.003B | 31 |
| TOTAL | 2.571 | 0.882 | 0.801 | 99.878 | 11.845 | 5.942 | 3.282 | 3.349 | 2.408 | 1.784 | 0.817 | 0.804 | TOTAL |
| MEAN | 0.083 | 0.032 | 0.026 | 3.90 | 0.382 | 0.185 | 0.073 | 0.078 | 0.080 | 0.058 | 0.027 | 0.016 | MEAN |
| MAX | 0.111 | 0.071 | 0.055 | 11.1 | 1.38 | 0.306 | 0.188 | 0.102 | 0.267 | 0.133 | 0.052 | 0.044 | MAX |
| MIN | 0.062 | 0.018 | 0.015 | 0.013 | 0.071 | 0.080 | 0.038 | 0.058 | 0.020 | 0.005 | 0.003 | 0.003 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.328
MAXIMUM DAILY, 11.1B ON APR 16
MINIMUM DAILY, 0.003B ON NOV 2

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 31 00 N
LONG 97 58 40 W
DRAINAGE AREA, 1 180 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
REGULATED

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 222 | JUL | 195 |
| FEB | 76.2 | AUG | 203 |
| MAR | 69.2 | SEP | 208 |
| APR | 7 510 | OCT | 154 |
| MAY | 1 020 | NOV | 70.6 |
| JUN | 478 | DEC | 43.5 |

TOTAL DISCHARGE, 10 300 dam³

## BOYNE RIVER NEAR ROSEISLE - STATION NO. 05OF011

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.0 B | 0 B | 0.388 | 0.005 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0.0 B | 0.0808 | 0.264 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0.0 B | 0.1808 | 0.194 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0.0 B | 1.22 B | 0.158 | 0.002 | 0 | 0.038 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0.0 B | 2.88 B | 0.128 | 0.001 | 0 | 0.020 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0.0 B | 3.48 B | 0.108 | 0.002 | 0 | 0.001 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0.0 B | 5.03 B | 0.110 | 0.028 | 0 | 0.001 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0.0 B | 5.02 B | 0.128 | 0.018 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0.0 B | 4.40 B | 0.130 | 0.001 | 0.003 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0.0 B | 3.57 B | 0.103 | 0.001 | 0.001 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0.0 B | 2.15 B | 0.082 | 0.003 | 0.005 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0.0 B | 1.74 B | 0.081 | 0.021 | 0.002 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0.0 B | 1.69 | 0.091 | 0.280 | 0.001 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0.0 B | 2.49 | 0.047 | 0.183 | 0.001 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0.0 B | 2.78 | 0.048 | 0.070 | 0.004 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0.0 B | 2.91 | 0.028 | 0.040 | 0.001 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0.0 B | 2.28 | 0.028 | 0.021 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0.0 B | 2.27 | 0.028 | 0.015 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0.0 B | 2.45 | 0.028 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0.0 B | 2.48 | 0.024 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0.0 B | 2.21 | 0.024 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0.0 B | 2.06 | 0.012 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0.0 B | 1.84 | 0.012 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0.0 B | 1.81 | 0.012 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0.0 B | 1.80 | 0.018 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0.0 B | 1.28 | 0.020 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0.0 B | 1.06 | 0.018 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0.0 B | 0.828 | 0.018 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0.0 B | 0.678 | 0.018 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0.0 B | 0.563 | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0.0 B | | 0.005 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 82.820 | 2.388 | 0.878 | 0.018 | 0.111 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 2.68 | 0.078 | 0.023 | 0.001 | 0.004 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 5.03 | 0.388 | 0.280 | 0.005 | 0.038 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0.005 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.289
MAXIMUM DAILY, 5.03B ON APR 7
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
5.15B AT 13:07 CST ON APR 8

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 32 38 N
LONG 98 24 52 W
DRAINAGE AREA, 874 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 1.59 |
| FEB | --- | AUG | 9.59 |
| MAR | 0 | SEP | 0 |
| APR | 5 430 | OCT | 0 |
| MAY | 205 | NOV | --- |
| JUN | 56.8 | DEC | --- |

TOTAL DISCHARGE, 5 700 dam³

## BOYNE RIVER NEAR STEPHENFIELD - STATION NO. 05OF008

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.0708 | 0.0648 | 0.0808 | 0.0888 | 0.883 | 0.138 | 0.182 | 0.095 | 0.142 | 0.190 | 0.082 | 0.0488 | 1 |
| 2 | 0.0748 | 0.0828 | 0.0848 | 0.0488 | 0.748 | 0.148 | 0.182 | 0.115 | 0.168 | 0.125 | 0.081 | 0.0478 | 2 |
| 3 | 0.0708 | 0.0808 | 0.0848 | 0.1488 | 0.842 | 0.151 | 0.180 | 0.130 | 0.188 | 0.118 | 0.083 | 0.0438 | 3 |
| 4 | 0.0688 | 0.0818 | 0.0758 | 0.2088 | 0.881 | 0.182 | 0.182 | 0.141 | 0.202 | 0.110 | 0.080 | 0.0448 | 4 |
| 5 | 0.0888 | 0.0808 | 0.0848 | 0.1888 | 0.502 | 0.180 | 0.178 | 0.140 | 0.228 | 0.108 | 0.048 | 0.0438 | 5 |
| 6 | 0.0888 | 0.0788 | 0.0838 | 0.0708 | 0.388 | 0.143 | 0.173 | 0.138 | 0.188 | 0.104 | 0.083 | 0.0418 | 6 |
| 7 | 0.0658 | 0.0768 | 0.0648 | 0.0428 | 0.380 | 0.147 | 0.189 | 0.134 | 0.091 | 0.107 | 0.058 | 0.0388 | 7 |
| 8 | 0.0888 | 0.0808 | 0.0828 | 0.0748 | 0.480 | 0.158 | 0.178 | 0.132 | 0.048 | 0.108 | 0.078 | 0.0348 | 8 |
| 9 | 0.0858 | 0.0748 | 0.0828 | 0.1158 | 0.438 | 0.184 | 0.184 | 0.135 | 0.181 | 0.110 | 0.080 | 0.0398 | 9 |
| 10 | 0.0898 | 0.0788 | 0.0818 | 2.18 B | 0.364 | 0.178 | 0.177 | 0.128 | 0.180 | 0.102 | 0.088 | 0.0378 | 10 |
| 11 | 0.0758 | 0.0778 | 0.0818 | 4.48 B | 0.322 | 0.182 | 0.170 | 0.122 | 0.220 | 0.080 | 0.0888 | 0.0348 | 11 |
| 12 | 0.0608 | 0.0788 | 0.0808 | 3.47 B | 0.274 | 0.188 | 0.188 | 0.128 | 0.218 | 0.078 | 0.0808 | 0.0318 | 12 |
| 13 | 0.0788 | 0.0748 | 0.0808 | 2.83 B | 0.248 | 0.209 | 0.158 | 0.118 | 0.077 | 0.0898 | 0.0278 | 13 |
| 14 | 0.0788 | 0.0748 | 0.0818 | 4.08 B | 0.218 | 0.188 | 0.158 | 0.118 | 0.078 | 0.0878 | 0.0258 | 14 |
| 15 | 0.0778 | 0.0738 | 0.0798 | 5.88 B | 0.193 | 0.197 | 0.118 | 0.107 | 0.117 | 0.072 | 0.0808 | 0.0238 | 15 |
| 16 | 0.0778 | 0.0748 | 0.0808 | 9.37 | 0.138 | 0.201 | 0.120 | 0.187 | 0.112 | 0.074 | 0.0708 | 0.0288 | 16 |
| 17 | 0.0788 | 0.0738 | 0.0808 | 7.27 | 0.127 | 0.198 | 0.118 | 0.180 | 0.108 | 0.070 | 0.0728 | 0.0277 | 17 |
| 18 | 0.0768 | 0.0728 | 0.0788 | 5.18 | 0.181 | 0.184 | 0.111 | 0.188 | 0.105 | 0.071 | 0.0708 | 0.0228 | 18 |
| 19 | 0.0808 | 0.0718 | 0.0788 | 4.08 | 0.183 | 0.180 | 0.108 | 0.185 | 0.101 | 0.088 | 0.0888 | 0.0248 | 19 |
| 20 | 0.0798 | 0.0708 | 0.0778 | 4.95 | 0.180 | 0.177 | 0.100 | 0.183 | 0.098 | 0.088 | 0.0888 | 0.0258 | 20 |
| 21 | 0.0818 | 0.0828 | 0.0758 | 4.85 | 0.178 | 0.170 | 0.088 | 0.148 | 0.082 | 0.087 | 0.0878 | 0.0268 | 21 |
| 22 | 0.0828 | 0.0848 | 0.0768 | 4.55 | 0.173 | 0.187 | 0.084 | 0.138 | 0.074 | 0.088 | 0.0838 | 0.0238 | 22 |
| 23 | 0.0838 | 0.0788 | 0.0718 | 4.50 | 0.185 | 0.182 | 0.087 | 0.128 | 0.082 | 0.083 | 0.0818 | 0.0288 | 23 |
| 24 | 0.0848 | 0.0778 | 0.0688 | 4.27 | 0.159 | 0.158 | 0.084 | 0.135 | 0.087 | 0.084 | 0.0888 | 0.0318 | 24 |
| 25 | 0.0828 | 0.0738 | 0.0788 | 3.88 | 0.152 | 0.155 | 0.085 | 0.140 | 0.088 | 0.082 | 0.0818 | 0.0388 | 25 |
| 26 | 0.0848 | 0.0888 | 0.0828 | 2.88 | 0.178 | 0.183 | 0.080 | 0.148 | 0.088 | 0.088 | 0.0888 | 0.0488 | 26 |
| 27 | 0.0848 | 0.0838 | 0.0888 | 3.24 | 0.188 | 0.178 | 0.078 | 0.132 | 0.121 | 0.087 | 0.0878 | 0.0438 | 27 |
| 28 | 0.0838 | 0.0828 | 0.0888 | 1.80 | 0.183 | 0.184 | 0.078 | 0.128 | 0.188 | 0.088 | 0.0848 | 0.0418 | 28 |
| 29 | 0.0848 | | 0.0888 | 1.41 | 0.184 | 0.158 | 0.078 | 0.124 | 0.218 | 0.084 | 0.0838 | 0.0428 | 29 |
| 30 | 0.0888 | | 0.0848 | 1.18 | 0.142 | 0.188 | 0.078 | 0.117 | 0.188 | 0.082 | 0.0888 | 0.0408 | 30 |
| 31 | 0.0828 | | 0.0838 | | 0.138 | | 0.073 | 0.128 | | 0.080 | | 0.0388 | 31 |
| TOTAL | 2.388 | 2.128 | 2.288 | 85.778 | 9.208 | 5.188 | 3.877 | 4.188 | 4.018 | 2.528 | 2.008 | 1.072 | TOTAL |
| MEAN | 0.077 | 0.078 | 0.074 | 2.88 | 0.297 | 0.172 | 0.128 | 0.135 | 0.134 | 0.081 | 0.087 | 0.035 | MEAN |
| MAX | 0.085 | 0.084 | 0.044 | 9.37 | 0.883 | 0.209 | 0.182 | 0.188 | 0.228 | 0.180 | 0.088 | 0.048 | MAX |
| MIN | 0.088 | 0.082 | 0.053 | 0.048 | 0.127 | 0.138 | 0.073 | 0.095 | 0.048 | 0.080 | 0.048 | 0.023 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.342
MAXIMUM DAILY, 9.37 ON APR 16
MINIMUM DAILY, 0.0228 ON DEC 15
MAXIMUM INSTANTANEOUS,
10.5 AT 15:24 CST ON APR 16

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 30 48 N
LONG 98 14 58 W
DRAINAGE AREA, 858 km²

B - ICE CONDITIONS

REGULATED SINCE 1984

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 205 | JUL | 344 |
| FEB | 184 | AUG | 382 |
| MAR | 188 | SEP | 347 |
| APR | 7 410 | OCT | 218 |
| MAY | 785 | NOV | 173 |
| JUN | 648 | DEC | 92.8 |

TOTAL DISCHARGE, 10 800 dam³

## BOYNE RIVER NEAR TREHERNE - STATION NO. 05OF010

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0.0508 | 0.194 | 0.001 | 0.001 | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | 0B | 2.27 B | 0.176 | 0.001 | 0.001 | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | 0B | 5.78 B | 0.156 | 0.001 | 0.001 | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | 0B | 5.20 B | 0.126 | 0.001 | 0 | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | 0B | 3.43 B | 0.113 | 0.001 | 0 | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | 0B | 1.77 B | 0.101 | 0.001 | 0 | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.8908 | 0.084 | 0.003 | 0 | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.7928 | 0.089 | 0.005 | 0 | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.7388 | 0.103 | 0.009 | 0 | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.6108 | 0.093 | 0.015 | 0 | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.5388 | 0.074 | 0.008 | 0 | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.8838 | 0.058 | 0.018 | 0 | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | 0B | 1.07 B | 0.048 | 0.201 | 0 | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | 0B | 1.18 B | 0.037 | 0.338 | 0 | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | 0B | 1.81 B | 0.028 | 0.288 | 0 | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | 0B | 1.78 B | 0.018 | 0.171 | 0 | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | 0B | 1.48 B | 0.017 | 0.088 | 0 | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | 0B | 1.28 | 0.030 | 0.055 | 0 | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | 0B | 1.28 | 0.028 | 0.048 | 0 | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | 0B | 1.28 | 0.024 | 0.036 | 0 | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | 0B | 1.14 | 0.010 | 0.008 | 0 | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | 0B | 1.04 | 0.008 | 0.003 | 0 | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.820 | 0.008 | 0.001 | 0 | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.798 | 0.008 | 0.001 | 0 | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.788 | 0.008 | 0.001 | 0 | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.803 | 0.009 | 0.001 | 0 | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.434 | 0.010 | 0.001 | 0 | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.329 | 0.010 | 0.001 | 0 | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | 0B | 0.286 | 0.010 | 0.001 | 0 | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | 0B | 0.228 | 0.008 | 0.001 | 0 | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | 0B | | 0.004 | | 0 | --- | | --- | --- | --- | 31 |
| TOTAL | --- | --- | 0 | 40.138 | 1.885 | 1.319 | 0.003 | --- | --- | --- | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 1.34 | 0.054 | 0.044 | 0 | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | 0 | 5.78 | 0.194 | 0.336 | 0.001 | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.080 | 0.004 | 0.001 | 0 | --- | --- | --- | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.354
MAXIMUM DAILY, 5.780 ON APR 3
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
6.530 AT 07:00 CST ON APR 3

SUMMARY FOR THE MONTHS MAR TO JUN

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 40 15 N
LONG 98 38 35 W
DRAINAGE AREA, 274 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0.28 |
| FEB | --- | AUG | --- |
| MAR | 0 | SEP | --- |
| APR | 3 470 | OCT | --- |
| MAY | 148 | NOV | --- |
| JUN | 114 | DEC | --- |

TOTAL DISCHARGE, 3 730 dam³

## BRERETON LAKE AT BRERETON LAKE (INVERNESS FALLS) - STATION NO. 05PG807

DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | 316.011E | 316.177E | 316.105 | 316.083E | 316.030E | 316.086 | 316.074E | 316.803 | --- | 1 |
| 2 | --- | --- | --- | 316.001 | 316.186 | 316.097E | 316.081 | 316.032 | 316.043E | 316.087E | --- | --- | 2 |
| 3 | --- | --- | --- | 315.991E | 316.190E | 316.090E | 316.078E | 316.042E | 316.024E | 316.098E | --- | --- | 3 |
| 4 | --- | --- | --- | 315.981E | 316.163E | 316.082E | 316.086 | 316.062E | 316.014E | 316.882 | --- | --- | 4 |
| 5 | --- | --- | --- | 315.971 | 316.177E | 316.075 | 316.086 | 316.082 | 315.999E | 316.852E | --- | --- | 5 |
| 6 | --- | --- | --- | 315.988E | 316.170E | 316.082E | 316.082 | 316.068E | 315.985E | 315.881E | --- | --- | 6 |
| 7 | --- | --- | --- | 315.982 | 316.164E | 316.090 | 316.076 | 316.083 | 316.971 | 315.861E | --- | --- | 7 |
| 8 | --- | --- | --- | 319.858E | 316.157 | 316.086 | 316.067E | 316.083E | 315.980E | 315.850E | --- | --- | 8 |
| 9 | --- | --- | 315.986 | 316.850E | 316.148E | 316.104E | 316.084 | 316.083 | 315.985E | 315.850E | --- | --- | 9 |
| 10 | --- | --- | --- | 315.844 | 316.138 | 316.112E | 316.047 | 316.083E | 315.983E | 315.849E | --- | --- | 10 |
| 11 | --- | --- | --- | 315.940E | 316.151 | 316.120 | 316.047 | 316.083 | 315.989 | 315.849 | --- | --- | 11 |
| 12 | --- | --- | --- | 315.937 | 316.148E | 316.126 | 316.047 | 316.083E | 315.937E | 315.848E | --- | --- | 12 |
| 13 | --- | --- | --- | 315.925 | 316.145E | 316.149E | 316.047 | 316.053 | 315.915E | 315.848E | --- | --- | 13 |
| 14 | --- | --- | --- | 315.925 | 316.142E | 316.172 | 316.047 | 316.043E | 315.893E | 315.847E | --- | --- | 14 |
| 15 | --- | --- | --- | 315.925E | 316.139 | 316.190 | 316.047 | 316.032 | 315.870 | 315.848E | --- | --- | 15 |
| 16 | --- | --- | --- | 315.935 | 316.090 | 316.176 | 316.078 | 316.032 | 315.887E | 315.845E | --- | --- | 16 |
| 17 | --- | --- | --- | 315.937 | 316.093 | 316.178E | 316.074 | 316.035 | 315.905E | 315.845E | --- | --- | 17 |
| 18 | --- | --- | --- | 315.937 | 316.093 | 316.178E | 316.075E | 316.053 | 315.923E | 315.844E | --- | --- | 18 |
| 19 | --- | --- | --- | 315.937E | 316.087E | 316.176 | 316.076 | 316.075E | 315.939E | 315.843E | --- | --- | 19 |
| 20 | --- | --- | --- | 315.937 | 316.081E | 316.188E | 316.073E | 316.084 | 315.956 | 315.842E | --- | --- | 20 |
| 21 | --- | --- | --- | 315.940 | 316.075E | 316.200 | 316.086 | 316.108E | 315.940E | 315.842E | --- | --- | 21 |
| 22 | --- | --- | --- | 315.968E | 316.086E | 316.188E | 316.087E | 316.114 | 315.941E | 315.841E | --- | --- | 22 |
| 23 | --- | --- | --- | 315.991E | 316.092 | 316.183 | 316.085 | 316.114 | 315.933E | 315.840 | --- | --- | 23 |
| 24 | --- | --- | --- | 316.017 | 316.092 | 316.187E | 316.080E | 316.114E | 315.926E | 315.839E | --- | --- | 24 |
| 25 | --- | --- | --- | 316.047 | 316.076 | 316.181 | 316.036 | 316.114 | 315.918E | 315.832E | --- | --- | 25 |
| 26 | --- | --- | --- | 316.086 | 316.067E | 316.152E | 316.020E | 316.133 | 315.911E | 315.826E | --- | --- | 26 |
| 27 | --- | --- | --- | 316.139 | 316.088E | 316.133 | 316.017E | 316.133 | 315.904E | 315.824E | --- | --- | 27 |
| 28 | --- | --- | --- | 316.117 | 316.105 | 316.123 | 316.006 | 316.118E | 315.888E | 315.820E | --- | --- | 28 |
| 29 | --- | | --- | 316.137E | 316.105E | 316.117 | 316.020E | 316.104 | 315.888E | 315.818E | --- | --- | 29 |
| 30 | --- | | --- | 316.157E | 316.105E | 316.105E | 316.032 | 316.091E | 315.882E | 315.811E | --- | --- | 30 |
| 31 | --- | | --- | | 316.105E | | 316.029 | 316.074E | | 315.807E | | --- | 31 |
| MEAN | --- | --- | --- | 315.986 | 316.133 | 316.139 | 316.056 | 316.071 | 315.944 | 315.842 | --- | --- | MEAN |
| MAX | --- | --- | --- | 316.157 | 316.194 | 316.200 | 316.093 | 316.133 | 316.086 | 315.874 | --- | --- | MAX |
| MIN | --- | --- | --- | 315.935 | 316.082 | 316.076 | 316.006 | 316.030 | 315.870 | 315.807 | --- | --- | MIN |

WATER LEVELS IN METRES

MAXIMUM DAILY, 316.200 ON JUN 21

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 55 39 N
LONG 98 32 36 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1982

DRAINAGE AREA,
189 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## BROKENHEAD RIVER NEAR BEAUSEJOUR - STATION NO. 05AA003

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.1178 | 0.0788 | 0.0878 | 0.2278 | 5.08 | 3.48 | 8.03 | 1.27 | 0.738 | 0.028 | 0.186 | 0.1038 | 1 |
| 2 | 0.1128 | 0.0872 | 0.0838 | 0.2848 | 5.46 | 3.24 | 7.43 | 1.21 | 0.882 | 0.026 | 0.138 | 0.1038 | 2 |
| 3 | 0.1088 | 0.0838 | 0.0588 | 0.2988 | 4.78 | 2.88 | 8.73 | 1.41 | 0.486 | 0.021 | 0.131 | 0.0728 | 3 |
| 4 | 0.1038 | 0.0728 | 0.0548 | 0.3218 | 4.40 | 2.89 | 9.05 | 1.43 | 0.417 | 0.017 | 0.126 | 0.0518 | 4 |
| 5 | 0.0988 | 0.0788 | 0.0488 | 0.2828 | 4.28 | 2.41 | 8.13 | 1.28 | 0.487 | 0.018 | 0.112 | 0.0888 | 5 |
| 6 | 0.0848 | 0.0788 | 0.0458 | 0.2738 | 4.08 | 2.28 | 7.21 | 1.13 | 0.307 | 0.017 | 0.097 | 0.0838 | 6 |
| 7 | 0.0808 | 0.0818 | 0.0548 | 0.3218 | 4.00 | 2.88 | 7.48 | 0.884 | 0.260 | 0.018 | 0.088 | 0.0878 | 7 |
| 8 | 0.0998 | 0.0858 | 0.0788 | 0.2748 | 4.02 | 3.78 | 7.83 | 0.618 | 0.270 | 0.018 | 0.100 | 0.0728 | 8 |
| 9 | 0.1128 | 0.0908 | 0.0618 | 0.3888 | 4.02 | 4.21 | 7.93 | 0.705 | 0.337 | 0.018 | 0.085 | 0.0618 | 9 |
| 10 | 0.1048 | 0.0848 | 0.0908 | 0.3258 | 4.02 | 4.89 | 7.77 | 0.580 | 0.218 | 0.018 | 0.098 | 0.0858 | 10 |
| 11 | 0.1038 | 0.0888 | 0.0888 | 0.3698 | 3.93 | 5.23 | 8.90 | 0.124 | 0.208 | 0.028 | 0.1048 | 0.0888 | 11 |
| 12 | 0.1128 | 0.1038 | 0.1038 | 0.3198 | 3.85 | 5.78 | 8.51 | 0.443 | 0.208 | 0.027 | 0.0888 | 0.0818 | 12 |
| 13 | 0.1218 | 0.1088 | 0.0888 | 0.4008 | 3.38 | 6.06 | 5.61 | 0.323 | 0.215 | 0.023 | 0.0848 | 0.0788 | 13 |
| 14 | 0.1308 | 0.1128 | 0.0908 | 1.48 E | 3.05 | 6.22 | 5.19 | 0.321 | 0.213 | 0.027 | 0.0908 | 0.0728 | 14 |
| 15 | 0.1388 | 0.1128 | 0.0888 | 2.78 E | 2.78 | 6.74 | 4.87 | 0.308 | 0.218 | 0.037 | 0.0848 | 0.0878 | 15 |
| 16 | 0.1408 | 0.1038 | 0.1038 | 5.87 E | 2.48 | 10.8 | 4.15 | 0.404 | 0.188 | 0.038 | 0.0888 | 0.0728 | 16 |
| 17 | 0.1448 | 0.0908 | 0.1128 | 4.88 E | 2.38 | 10.9 | 3.85 | 0.411 | 0.184 | 0.042 | 0.1038 | 0.0788 | 17 |
| 18 | 0.1408 | 0.0788 | 0.1068 | 5.80 E | 1.85 | 10.9 | 3.71 | 0.338 | 0.120 | 0.040 | 0.1088 | 0.0818 | 18 |
| 19 | 0.1408 | 0.0878 | 0.1038 | 5.08 E | 2.05 | 10.9 | 3.24 | 0.408 | 0.045 | 0.044 | 0.1128 | 0.0888 | 19 |
| 20 | 0.1368 | 0.0848 | 0.0848 | 7.41 E | 2.15 | 9.78 | 2.88 | 0.478 | 0.041 | 0.087 | 0.0908 | 0.0888 | 20 |
| 21 | 0.1308 | 0.0888 | 0.0808 | 6.39 E | 2.18 | 9.37 | 2.58 | 0.388 | 0.038 | 0.038 | 0.0888 | 0.0818 | 21 |
| 22 | 0.1218 | 0.0838 | 0.0888 | 7.63 E | 2.14 | 9.81 | 2.29 | 0.388 | 0.036 | 0.039 | 0.1068 | 0.0788 | 22 |
| 23 | 0.1088 | 0.0878 | 0.0818 | 8.54 E | 2.13 | 9.01 | 2.08 | 0.518 | 0.038 | 0.041 | 0.1128 | 0.0728 | 23 |
| 24 | 0.0988 | 0.0728 | 0.0728 | 8.88 | 2.08 | 8.53 | 1.87 | 0.588 | 0.021 | 0.041 | 0.1218 | 0.0878 | 24 |
| 25 | 0.0948 | 0.0788 | 0.0878 | 8.83 | 2.24 | 8.98 | 1.88 | 0.800 | 0.028 | 0.039 | 0.1288 | 0.0838 | 25 |
| 26 | 0.0908 | 0.0818 | 0.0908 | 7.58 | 2.87 | 9.53 | 2.10 | 0.870 | 0.028 | 0.039 | 0.0888 | 0.0838 | 26 |
| 27 | 0.0908 | 0.0908 | 0.1128 | 7.46 | 2.87 | 9.14 | 1.82 | 0.881 | 0.028 | 0.040 | 0.0848 | 0.0728 | 27 |
| 28 | 0.0858 | 0.0898 | 0.1448 | 7.20 | 3.28 | 8.70 | 1.89 | 0.852 | 0.025 | 0.038 | 0.0908 | 0.0788 | 28 |
| 29 | 0.0818 | | 0.1888 | 6.88 | 3.84 | 8.43 | 1.47 | 0.778 | 0.033 | 0.156 | 0.0888 | 0.0818 | 29 |
| 30 | 0.0818 | | 0.1808 | 6.36 | 3.82 | 8.28 | 1.40 | 0.748 | 0.032 | 0.246 | 0.1128 | 0.0818 | 30 |
| 31 | 0.0888 | | 0.1838 | | 3.81 | | 1.32 | 0.788 | | 0.218 | | 0.0788 | 31 |
| TOTAL | 3.408 | 2.298 | 2.827 | 113.718 | 103.47 | 212.99 | 139.38 | 21.889 | 8.005 | 1.483 | 3.280 | 2.400 | TOTAL |
| MEAN | 0.110 | 0.082 | 0.094 | 3.79 | 3.34 | 7.10 | 4.50 | 0.706 | 0.280 | 0.048 | 0.108 | 0.077 | MEAN |
| MAX | 0.148 | 0.112 | 0.183 | 8.88 | 6.08 | 10.9 | 8.03 | 1.43 | 0.738 | 0.246 | 0.186 | 0.103 | MAX |
| MIN | 0.081 | 0.084 | 0.048 | 0.227 | 1.88 | 2.28 | 1.32 | 0.124 | 0.022 | 0.018 | 0.080 | 0.083 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 1.88
MAXIMUM DAILY, 10.8 ON JUN 17
MINIMUM DAILY, 0.018 ON OCT 7
MAXIMUM INSTANTANEOUS,
11.2 AT 14:87 CST ON JUN 17

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 05 25 N
LONG 96 25 48 W
DRAINAGE AREA, 1 810 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 284 | JUL | 12 000 |
| FEB | 186 | AUG | 1 880 |
| MAR | 253 | SEP | 618 |
| APR | 9 830 | OCT | 128 |
| MAY | 8 940 | NOV | 282 |
| JUN | 18 400 | DEC | 207 |

TOTAL DISCHARGE, 92 800 dam³

## BROKENHEAD RIVER NEAR VIVIAN - STATION NO. 05AA004

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 1.88 | 0.982 | 4.02 | 0.183 | 0.004 | 0 E | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 1.38 | 0.838 | 3.82 | 0.103 | 0.004 | 0 A | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 1.28 | 0.808 | 3.48 | 0.080 | 0.003 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 1.24 | 0.880 | 3.14 | 0.088 | 0.004 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 B | 1.24 | 0.874 | 2.82 | 0.041 | 0.003 | 0.024 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0 B | 1.27 | 0.884 | 4.18 | 0.018 | 0.003 | 0.063A | --- | --- | 6 |
| 7 | --- | --- | 0B | 0 B | 1.28 | 1.22 | 4.30 | 0.018 | 0.004 | 0 E | --- | --- | 7 |
| 8 | --- | --- | 0B | 0 B | 1.28 | 1.28 | 4.28 | 0.018 | 0.003 | 0 E | --- | --- | 8 |
| 9 | --- | --- | 0B | 0 B | 1.27 | 1.61 | 4.02 | 0.030 | 0.002 | 0 E | --- | --- | 9 |
| 10 | --- | --- | 0B | 0 B | 1.24 | 1.49 | 3.80 | 0.004 | 0.001 | 0 E | --- | --- | 10 |
| 11 | --- | --- | 0B | 0 B | 1.20 | 1.44 | 3.14 | 0 | 0.002 | 0 E | --- | --- | 11 |
| 12 | --- | --- | 0B | 0 B | 1.15 | 1.71 | 2.88 | 0 | 0.002 | 0 E | --- | --- | 12 |
| 13 | --- | --- | 0B | 0 B | 1.08 | 2.88 | 3.87 | 0 | 0.001 | 0 E | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.0048 | 1.03 | 3.14 | 3.28 | 0 | 0 | 0 E | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.1488 | 0.992 | 3.21 | 1.89 | 0 | 0 | 0 E | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.8728 | 0.948 | 3.17 | 1.80 | 0 | 0 | 0 E | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.4808 | 0.831 | 3.10 | 1.88 | 0 | 0 | 0 E | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.6188 | 0.908 | 3.38 | 1.38 | 0 | 0 | 0 E | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.8778 | 0.888 | 3.48 | 1.21 | 0 | 0 | 0 E | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.9888 | 0.883 | 3.31 | 1.07 | 0.038 | 0 | 0 E | --- | --- | 20 |
| 21 | --- | --- | 0B | 1.01 B | 0.888 | 3.84 | 0.842 | 0.087 | 0 | 0 E | --- | --- | 21 |
| 22 | --- | --- | 0B | 2.03 B | 0.842 | 3.78 | 0.831 | 0.047 | 0 | 0 E | --- | --- | 22 |
| 23 | --- | --- | 0B | 2.88 B | 0.838 | 3.81 | 0.738 | 0.023 | 0 | 0 E | --- | --- | 23 |
| 24 | --- | --- | 0B | 3.10 B | 0.817 | 3.48 | 0.838 | 0.007 | 0 | 0 E | --- | --- | 24 |
| 25 | --- | --- | 0B | 3.03 | 0.817 | 3.82 | 0.874 | 0.008 | 0 | 0 E | --- | --- | 25 |
| 26 | --- | --- | 0B | 2.74 | 0.852 | 4.09 | 0.518 | 0.032 | 0 | 0 E | --- | --- | 26 |
| 27 | --- | --- | 0B | 2.48 | 0.884 | 4.10 | 0.437 | 0.008 | 0 | 0 E | --- | --- | 27 |
| 28 | --- | --- | 0B | 2.24 | 1.02 | 4.02 | 0.378 | 0.004 | 0 A | 0 E | --- | --- | 28 |
| 29 | --- | | 0B | 1.88 | 1.01 | 4.01 | 0.328 | 0.004 | 0 E | 0 E | --- | --- | 29 |
| 30 | --- | | 0B | 1.77 | 1.01 | 4.12 | 0.280 | 0.005 | 0 E | 0 A | --- | --- | 30 |
| 31 | --- | | 0B | | 0.981 | | 0.213 | 0.004 | | 0 E | | --- | --- | 31 |
| TOTAL | --- | --- | 0 | 28.887 | 33.238 | 78.497 | 66.168 | 0.803 | 0.036 | 0.027 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.888 | 1.07 | 3.81 | 3.07 | 0.038 | 0.001 | 0.001 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 3.10 | 1.88 | 4.13 | 4.30 | 0.183 | 0.008 | 0.024 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0.817 | 0.874 | 0.213 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.828
MAXIMUM DAILY, 4.30 ON JUL 7
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
4.32 AT 15:47 CST ON JUL 7

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 53 07 N
LONG 96 21 57 W
DRAINAGE AREA, 4357 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 5 840 |
| FEB | --- | AUG | 99.4 |
| MAR | 0 | SEP | 3.28 |
| APR | 3 200 | OCT | 3.33 |
| MAY | 3 870 | NOV | --- |
| JUN | 8 770 | DEC | --- |

TOTAL DISCHARGE, 17 800 dam³

## BUFFALO CREEK NEAR ROSENFELD - STATION NO. 05DC019

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0E | 0 B | 0.408 | 0.088 | 0.006 | 0 | 0E | 0 | 0 | --- | 1 |
| 2 | --- | --- | 0E | 0 B | 0.272 | 0.043 | 0.003 | 0 | 0E | 0 | --- | --- | 2 |
| 3 | --- | --- | 0E | 0 B | 0.220 | 0.031 | 0.003 | 0 | 0E | 0 | --- | --- | 3 |
| 4 | --- | --- | 0E | 0 B | 0.187 | 0.021 | 0.003 | 0 | 0E | 0 | --- | --- | 4 |
| 5 | --- | --- | 0E | 0 B | 0.187 | 0.017 | 0 | 0 | 0E | 0 | --- | --- | 5 |
| 6 | --- | --- | 0E | 0 B | 0.144 | 0.016 | 0 | 0 | 0A | 0 | --- | --- | 6 |
| 7 | --- | --- | 0E | 0 B | 0.129 | 0.023 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0E | 0 B | 0.126 | 0.017 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0E | 0 B | 0.123 | 0.010 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0E | 0 B | 0.114 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0E | 0 B | 0.107 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0E | 0 B | 0.101 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0E | 0 B | 0.088 | 0.028 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0E | 0.0028 | 0.102 | 0.023 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0E | 0.0308 | 0.202 | 0.017 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0E | 0.1178 | 0.231 | 0.021 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0E | 1.01 B | 0.218 | 0.065 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0E | 3.75 B | 0.207 | 0.051 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0E | 8.08 B | 0.188 | 0.041 | 0 | 0 | 0 | 0.018 | --- | --- | 19 |
| 20 | --- | --- | 0E | 11.5 B | 0.179 | 0.033 | 0 | 0 | 0 | 0.071 | --- | --- | 20 |
| 21 | --- | --- | 0E | 7.85 B | 0.158 | 0.030 | 0 | 0 | 0 | 0.071 | --- | --- | 21 |
| 22 | --- | --- | 0E | 4.67 B | 0.142 | 0.027 | 0 | 0 | 0 | 0.080 | --- | --- | 22 |
| 23 | --- | --- | 0E | 2.88 | 0.128 | 0.030 | 0 | 0 | 0 | 0.053 | --- | --- | 23 |
| 24 | --- | --- | 0E | 2.50 | 0.113 | 0.029 | 0 | 0 | 0 | 0.048 | --- | --- | 24 |
| 25 | --- | --- | 0E | 2.08 | 0.101 | 0.027 | 0 | 0 | 0 | 0.048 | --- | --- | 25 |
| 26 | --- | --- | 0E | 1.78 | 0.081 | 0.022 | 0 | 0 | 0 | 0.044 | --- | --- | 26 |
| 27 | --- | --- | 0E | 1.48 | 0.081 | 0.018 | 0 | 0 | 0 | 0.038 | --- | --- | 27 |
| 28 | --- | --- | 0E | 1.08 | 0.077 | 0.013 | 0 | 0 | 0 | 0.028 | --- | --- | 28 |
| 29 | --- | | 0E | 0.805 | 0.070 | 0.014 | 0 | 0A | 0 | 0.018 | --- | --- | 29 |
| 30 | --- | | 0E | 0.822 | 0.088 | 0.012 | 0 | 0E | 0 | 0.010 | --- | --- | 30 |
| 31 | --- | | 0E | | 0.084 | | 0 | 0E | | 0.008 | | --- | 31 |
| TOTAL | --- | --- | 0 | 48.307 | 4.817 | 0.733 | 0.018 | 0 | 0 | 0.808 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 1.81 | 0.148 | 0.024 | 0 | 0 | 0 | 0.018 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 11.5 | 0.408 | 0.088 | 0.008 | 0 | 0 | 0.071 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0.084 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.221
MAXIMUM DAILY, 11.5 B ON APR 20
MINIMUM DAILY, 0E ON MAR 1

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 11 30 N
LONG 97 26 00 W
DRAINAGE AREA, 776 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 1 30 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 4 170 | OCT | 43 8 |
| MAY | 388 | NOV | --- |
| JUN | 83 3 | DEC | --- |

TOTAL DISCHARGE, 4 880 dam³

REMARKS - PREVIOUS TO 1986 PUBLISHED UNDER THE NAME "PLUM RIVER NEAR ROSENFELD"

## BURNTWOOD RIVER ABOVE LEAF RAPIDS - STATION NO. 05TE002

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4.888 | 3.478 | 2.708 | 2.488 | 8.808 | 28.8 | 15.0 | 8.07 | 20.8 | 20.8 | 17.38 | 10.0 B | 1 |
| 2 | 4.808 | 3.428 | 2.708 | 2.488 | 12.8 B | 27.7 | 15.3 | 8.94 | 19.8 | 20.0 | 17.18 | 9.708 | 2 |
| 3 | 4.588 | 3.388 | 2.708 | 2.488 | 16.8 B | 26.8 | 15.4 | 8.75 | 18.3 | 19.8 | 16.98 | 9.808 | 3 |
| 4 | 4.538 | 3.388 | 2.708 | 2.488 | 18.2 B | 24.5 | 15.7 | 8.37 | 17.8 | 19.8 | 18.78 | 9.308 | 4 |
| 5 | 4.478 | 3.348 | 2.688 | 2.488 | 23.5 B | 23.8 | 15.8 | 8.11 | 17.8 | 19.1 | 18.68 | 9.108 | 5 |
| 6 | 4.418 | 3.318 | 2.688 | 2.488 | 27.7 B | 23.8 | 15.3 | 7.81 | 17.5 | 19.0 | 16.38 | 8.808 | 6 |
| 7 | 4.348 | 3.278 | 2.688 | 2.488 | 26.0 B | 21.5 | 15.0 | 7.84 | 17.1 | 19.2 | 16.08 | 8.608 | 7 |
| 8 | 4.308 | 3.258 | 2.688 | 2.488 | 27.7 B | 20.8 | 14.8 | 7.84 | 16.7 | 19.5 | 15.78 | 8.508 | 8 |
| 9 | 4.258 | 3.238 | 2.688 | 2.488 | 28.8 B | 20.0 | 14.8 | 7.81 | 16.8 | 19.8 | 15.58 | 8.408 | 9 |
| 10 | 4.268 | 3.208 | 2.648 | 2.488 | 28.3 B | 19.4 | 14.8 | 7.83 | 16.4 | 19.8 | 15.38 | 8.308 | 10 |
| 11 | 4.228 | 3.148 | 2.648 | 2.488 | 28.0 | 18.4 | 14.3 | 7.83 | 21.3 | 20.2 | 15.08 | 8.008 | 11 |
| 12 | 4.188 | 3.138 | 2.608 | 2.488 | 26.8 | 17.1 | 14.0 | 7.78 | 24.0 | 20.7 | 14.78 | 7.408 | 12 |
| 13 | 4.148 | 3.098 | 2.608 | 2.488 | 26.8 | 16.8 | 13.8 | 7.81 | 25.1 | 21.1 | 14.58 | 7.608 | 13 |
| 14 | 4.108 | 3.058 | 2.608 | 2.488 | 26.4 | 16.0 | 13.3 | 7.48 | 25.1 | 21.1 | 14.38 | 7.508 | 14 |
| 15 | 4.088 | 3.038 | 2.608 | 2.488 | 26.2 | 15.8 | 13.0 | 7.21 | 24.8 | 20.8 | 14.08 | 7.408 | 15 |
| 16 | 4.058 | 2.988 | 2.608 | 2.488 | 24.2 | 15.8 | 12.8 | 7.13 | 26.2 | 20.1 | 13.78 | 7.308 | 16 |
| 17 | 4.048 | 2.948 | 2.608 | 2.488 | 24.1 | 15.7 | 12.4 | 7.00 | 27.8 | 19.9 | 13.58 | 7.108 | 17 |
| 18 | 4.028 | 2.928 | 2.608 | 2.488 | 25.8 | 15.5 | 12.1 | 8.94 | 28.8 | 19.9 | 13.38 | 7.008 | 18 |
| 19 | 3.988 | 2.918 | 2.608 | 2.488 | 28.1 | 15.5 | 12.1 | 7.34 | 28.8 | 20.1 | 13.08 | 8.808 | 19 |
| 20 | 3.928 | 2.888 | 2.608 | 2.488 | 35.8 | 15.4 | 11.8 | 7.87 | 28.0 | 20.3 | 12.78 | 8.708 | 20 |
| 21 | 3.888 | 2.878 | 2.608 | 3.448 | 44.8 | 15.0 | 11.8 | 7.34 | 28.8 | 20.1 | 12.38 | 8.608 | 21 |
| 22 | 3.808 | 2.818 | 2.588 | 3.448 | 52.0 | 14.8 | 11.7 | 6.98 | 28.6 | 19.7 | 12.08 | 8.508 | 22 |
| 23 | 3.788 | 2.798 | 2.588 | 3.448 | 54.2 | 14.0 | 11.6 | 6.75 | 28.7 | 19.3 | 11.78 | 8.408 | 23 |
| 24 | 3.788 | 2.778 | 2.568 | 2.568 | 52.8 | 13.3 | 11.4 | 6.90 | 28.3 | 18.9 | 11.58 | 8.308 | 24 |
| 25 | 3.698 | 2.768 | 2.568 | 2.708 | 48.0 | 12.9 | 11.3 | 7.48 | 25.5 | 18.8 | 11.38 | 8.208 | 25 |
| 26 | 3.678 | 2.728 | 2.528 | 2.928 | 43.4 | 12.7 | 10.8 | 8.85 | 24.7 | 18.58 | 11.18 | 8.308 | 26 |
| 27 | 3.648 | 2.728 | 2.528 | 3.268 | 38.2 | 12.8 | 10.8 | 15.4 | 23.8 | 18.08 | 10.88 | 8.108 | 27 |
| 28 | 3.608 | 2.738 | 2.528 | 4.048 | 36.1 | 13.1 | 10.1 | 20.1 | 23.1 | 18.08 | 10.88 | 8.108 | 28 |
| 29 | 3.588 | | 2.528 | 5.058 | 33.8 | 13.8 | 9.75 | 21.8 | 22.3 | 17.78 | 10.38 | 8.108 | 29 |
| 30 | 3.578 | | 2.528 | 7.408 | 32.8 | 14.3 | 9.52 | 21.7 | 21.3 | 17.58 | 10.18 | 8.008 | 30 |
| 31 | 3.538 | | 2.488 | | 31.2 | | 9.27 | 21.2 | | 17.58 | | 8.008 | 31 |
| TOTAL | 126.57 | 85.47 | 80.82 | 84.84 | 882.20 | 533.8 | 396.44 | 301.40 | 688.0 | 804.7 | 413.8 | 231.90 | TOTAL |
| MEAN | 4.08 | 3.08 | 2.61 | 2.83 | 30.7 | 17.8 | 12.8 | 9.72 | 22.9 | 19.5 | 13.8 | 7.48 | MEAN |
| MAX | 4.88 | 3.47 | 2.70 | 7.40 | 54.2 | 28.8 | 15.7 | 21.8 | 28.8 | 21.1 | 17.3 | 10.0 | MAX |
| MIN | 3.53 | 2.72 | 2.48 | 2.44 | 8.80 | 12.8 | 9.27 | 6.75 | 16.7 | 17.5 | 10.1 | 8.00 | MIN |

### SUMMARY FOR THE YEAR 1989

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 12.3
MAXIMUM DAILY, 54.2 ON MAY 23
MINIMUM DAILY, 2.448 ON APR 21
MAXIMUM INSTANTANEOUS,
54.4 AT 17:10 CST ON MAY 23

TYPE OF GAUGE - RECORDING
LOCATION - LAT 55 30 00 N
LONG 98 13 30 W
DRAINAGE AREA, 5 280 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 10 800 | JUL | 34 400 |
| FEB | 7 380 | AUG | 28 000 |
| MAR | 8 880 | SEP | 69 400 |
| APR | 7 300 | OCT | 82 200 |
| MAY | 82 300 | NOV | 38 700 |
| JUN | 49 100 | DEC | 20 900 |

TOTAL DISCHARGE, 389 000 dam³

## BURNTWOOD RIVER ABOVE MANASAN FALLS - STATION NO. 05TG005

DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | --- | --- | --- | 197.144 | 197.285 | 196.908 | 196.812 | --- | 1 |
| 2 | --- | --- | --- | --- | --- | --- | --- | 197.151 | 197.268 | 196.886 | 196.833 | --- | 2 |
| 3 | --- | --- | --- | --- | --- | --- | --- | 197.158 | 197.265 | 196.870 | 196.835 | --- | 3 |
| 4 | --- | --- | --- | --- | --- | --- | --- | 197.170 | 197.263 | 196.853 | 196.848 | --- | 4 |
| 5 | --- | --- | --- | --- | --- | --- | --- | 197.185 | 197.261 | 196.838 | 196.858 | --- | 5 |
| 6 | --- | --- | --- | --- | --- | --- | 196.907A | 197.190 | 197.258 | 196.821 | 196.880 | --- | 6 |
| 7 | --- | --- | --- | --- | --- | --- | 196.907 | 197.198 | 197.257 | 196.804 | 196.878 | --- | 7 |
| 8 | --- | --- | --- | --- | --- | --- | 196.908 | 197.208 | 197.264 | 196.790 | 196.880 | --- | 8 |
| 9 | --- | --- | --- | --- | --- | --- | 196.909 | 197.212 | 197.237 | 196.775 | 196.895 | --- | 9 |
| 10 | --- | --- | --- | --- | --- | --- | 196.917 | 197.218 | 197.243 | 196.784 | 196.897 | --- | 10 |
| 11 | --- | --- | --- | --- | --- | --- | 196.922 | 197.223 | 197.238 | 196.787 | 197.004 | --- | 11 |
| 12 | --- | --- | --- | --- | --- | --- | 196.924 | 197.214 | 197.224 | 196.763 | 197.003 | --- | 12 |
| 13 | --- | --- | --- | --- | --- | --- | 196.926 | 197.217 | 197.204 | 196.730 | 196.986 | --- | 13 |
| 14 | --- | --- | --- | --- | --- | --- | 196.929 | 197.218 | 197.195 | 196.716 | 196.975E | --- | 14 |
| 15 | --- | --- | --- | --- | --- | --- | 196.934 | 197.223 | 197.188 | 196.705 | 196.991 | --- | 15 |
| 16 | --- | --- | --- | --- | --- | --- | 196.947 | 197.227 | 197.175 | 196.695 | 197.018 | --- | 16 |
| 17 | --- | --- | --- | --- | --- | --- | 196.959 | 197.227 | 197.170 | 196.689 | 197.042 | --- | 17 |
| 18 | --- | --- | --- | --- | --- | --- | 196.973 | 197.226 | 197.167 | 196.683 | 197.080E | --- | 18 |
| 19 | --- | --- | --- | --- | --- | --- | 196.988 | 197.218 | 197.160 | 196.674 | 197.103 | --- | 19 |
| 20 | --- | --- | --- | --- | --- | --- | 197.000 | 197.224 | 197.128 | 196.693 | 197.128 | --- | 20 |
| 21 | --- | --- | --- | --- | --- | --- | 197.010 | 197.221 | 197.108 | 196.699 | 197.141E | 197.317A | 21 |
| 22 | --- | --- | --- | --- | --- | --- | 197.028 | 197.218 | 197.094 | 196.678 | 197.156 | 197.327 | 22 |
| 23 | --- | --- | --- | --- | --- | --- | 197.032 | 197.219 | 197.077 | 196.691 | --- | 197.384 | 23 |
| 24 | --- | --- | --- | --- | --- | --- | 197.043 | 197.224 | 197.052 | 196.704 | --- | 197.390 | 24 |
| 25 | --- | --- | --- | --- | --- | --- | 197.060 | 197.242 | 197.028 | 196.739 | --- | 197.393 | 25 |
| 26 | --- | --- | --- | --- | --- | --- | 197.084 | 197.255 | 197.010 | 196.752 | --- | 197.375 | 26 |
| 27 | --- | --- | --- | --- | --- | --- | 197.087 | 197.256 | 196.993 | 196.772 | --- | 197.393 | 27 |
| 28 | --- | --- | --- | --- | --- | --- | 197.094 | 197.254 | 196.971 | 196.840 | --- | 197.383 | 28 |
| 29 | --- | | --- | --- | --- | --- | 197.105 | 197.273 | 196.944 | 196.870 | --- | 197.377 | 29 |
| 30 | --- | | --- | --- | --- | --- | 197.122 | 197.277 | 196.921 | 196.888 | --- | 197.384 | 30 |
| 31 | --- | | --- | | --- | | 197.130 | 197.278 | | 196.897 | | 197.384 | 31 |
| MEAN | --- | --- | --- | --- | --- | --- | --- | 197.220 | 197.156 | 196.770 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | --- | 197.278 | 197.288 | 196.908 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | --- | --- | 197.144 | 196.921 | 196.693 | --- | --- | MIN |

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 55 42 51 N
LONG 97 56 53 W

A - MANUAL GAUGE
E - ESTIMATED
REGULATED

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (MAN. HYDRO EXT.)

## BURNTWOOD RIVER NEAR THOMPSON - STATION NO. 05TG001

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7788 | 7888 | 7878 | 7818 | 8058 | 838 | 800A | 814 | 1 000 | 848 | 788 | 8818 | 1 |
| 2 | 7788 | 7888 | 7878 | 7808 | 8778 | 835 | 803E | 822 | 1 010 | 830 | 804 | 8828 | 2 |
| 3 | 7748 | 7868 | 7878 | 7878 | 8858 | 831 | 803E | 833 | 1 010 | 820 | 814 | 8818 | 3 |
| 4 | 7738 | 7868 | 7878 | 7868 | 8598 | 826 | 808E | 850 | 1 010 | 813 | 821 | 8818 | 4 |
| 5 | 7738 | 7868 | 7878 | 7548 | 9028 | 824 | 808E | 851 | 1 010 | 804 | 836 | 8818 | 5 |
| 6 | 7728 | 7868 | 7878 | 7538 | 8088 | 821 | 808E | 850 | 1 010 | 788 | 838 | 8818 | 6 |
| 7 | 7728 | 7878 | 7878 | 7508 | 8128 | 817 | 809E | 852 | 1 010 | 783 | 853 | 8818 | 7 |
| 8 | 7728 | 7878 | 7878 | 7488 | 814 | 811 | 809E | 855 | 1 000 | 788 | 861 | 8818 | 8 |
| 9 | 7728 | 7878 | 7878 | 7488 | 808 | 808 | 813E | 861 | 1 000 | 783 | 885 | 8818 | 9 |
| 10 | 7718 | 7878 | 7878 | 7438 | 893 | 805 | 814E | 865 | 1 000 | 778 | 878 | 8818 | 10 |
| 11 | 7718 | 7878 | 7878 | 7388 | 881 | 802 | 815E | 868 | 887 | 772 | 8828 | 8818 | 11 |
| 12 | 7718 | 7878 | 7878 | 7368 | 876 | 798 | 817E | 870 | 887 | 787 | 8858 | 8818 | 12 |
| 13 | 7718 | 7878 | 7878 | 7328 | 888 | 790 | 819E | 874 | 882 | 783 | 8878 | 8818 | 13 |
| 14 | 7718 | 7878 | 7878 | 7288 | 857 | 788 | 825A | 874 | 878 | 780 | 8138 | 8818 | 14 |
| 15 | 7718 | 7878 | 7888 | 7258 | 850A | 780 | 828 | 877 | 873 | 768 | 8208 | 8818 | 15 |
| 16 | 7718 | 7888 | 7888 | 7218 | 841E | 774 | 828 | 878 | 868 | 752 | 8208 | 8818 | 16 |
| 17 | 7718 | 7888 | 7888 | 7188 | 858E | 778 | 835 | 880 | 857 | 747 | 8308 | 8818 | 17 |
| 18 | 7718 | 7888 | 7888 | 7168 | 858E | 788 | 838 | 888 | 857 | 738 | 8368 | 8818 | 18 |
| 19 | 7718 | 7888 | 7888 | 7108 | 857A | 787 | 842 | 887 | 848 | 738 | 8408 | 8818 | 19 |
| 20 | 7708 | 7888 | 7888 | 7068 | 852 | 788 | 848 | 881 | 840 | 738 | 8448 | 8818 | 20 |
| 21 | 7708 | 7858 | 7888 | 7058 | 850 | 781 | 858 | 881 | 838 | 738 | 8478 | 8818 | 21 |
| 22 | 7708 | 7858 | 7848 | 7048 | 847 | 784 | 880 | 882 | 827 | 737 | 8508 | 8808 | 22 |
| 23 | 7708 | 7888 | 7848 | 7048 | 847 | 788 | 880 | 882 | 818 | 737 | 8528 | 8808 | 23 |
| 24 | 7708 | 7888 | 7848 | 7058 | 850 | 770 | 885 | 884 | 808 | 742 | 8588 | 8808 | 24 |
| 25 | 7708 | 7888 | 7848 | 7128 | 858 | 778 | 872 | 887 | 887 | 748 | 8578 | 8808 | 25 |
| 26 | 7708 | 7888 | 7848 | 7808 | 852 | 785 | 878 | 893 | 887 | 752 | 8588 | 8808 | 26 |
| 27 | 7708 | 7868 | 7838 | 7488 | 858 | 788 | 883 | 885 | 877 | 774 | 8588 | 8808 | 27 |
| 28 | 7708 | 7878 | 7838 | 8188 | 851 | 781 | 880 | 885 | 884 | 781 | 8588 | 8808 | 28 |
| 29 | 7708 | | 7838 | 8388 | 847 | 784 | 884 | 887 | 887 | 784 | 8588 | 8808 | 29 |
| 30 | 7708 | | 7828 | 8538 | 845 | 788 | 881 | 1 000 | 884 | 788 | 8618 | 8808 | 30 |
| 31 | 7888 | | 7828 | | 841 | | 887 | 1 000 | | 788 | | 8808 | 31 |
| TOTAL | 23 804 | 21 470 | 23 728 | 22 340 | 26 847 | 23 818 | 26 834 | 30 133 | 28 878 | 23 857 | 27 138 | 28 782 | TOTAL |
| MEAN | 771 | 767 | 765 | 745 | 888 | 794 | 840 | 872 | 958 | 773 | 905 | 881 | MEAN |
| MAX | 778 | 788 | 787 | 853 | 914 | 838 | 887 | 1 000 | 1 010 | 848 | 881 | 862 | MAX |
| MIN | 788 | 788 | 782 | 784 | 841 | 781 | 800 | 814 | 884 | 738 | 788 | 880 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 844
MAXIMUM DAILY, 1 010 ON SEP 2
MINIMUM DAILY, 7048 ON APR 22
MAXIMUM INSTANTANEOUS,
1 010 AT 17:00 CST ON SEP 3

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 55 44 40 N
LONG 97 53 30 W
DRAINAGE AREA, 18 800 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
REGULATED SINCE 1973

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 2 070 000 | JUL | 2 250 000 |
| FEB | 1 880 000 | AUG | 2 800 000 |
| MAR | 2 050 000 | SEP | 2 480 000 |
| APR | 1 930 000 | OCT | 2 070 000 |
| MAY | 2 330 000 | NOV | 2 340 000 |
| JUN | 2 080 000 | DEC | 2 570 000 |

TOTAL DISCHARGE, 28 000 000 dam³

## BURROWS RESERVOIR NEAR MERRIDALE - STATION NO. 05LJ011

DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 823.828 | 823.818 | 823.368 | 823.318E | 823.633 | 823.884 | 824.262 | 824.538 | 824.882 | 824.844 | 824.882 | 824.882 | 1 |
| 2 | 823.822 | 823.808 | 823.368 | 823.286E | 823.633 | 823.884 | 824.313 | 824.538 | 824.885 | 824.825 | 824.882 | 824.888 | 2 |
| 3 | 823.818 | 823.888 | 823.343 | 823.278E | 823.630 | 823.700 | 824.334 | 824.883 | 824.888 | 824.818 | 824.886 | 824.886 | 3 |
| 4 | 823.810 | 823.890 | 823.328 | 823.264E | 823.848 | 823.888 | 824.343 | 824.802 | 824.877 | 824.818 | 824.886 | 824.886 | 4 |
| 5 | 823.801 | 823.884 | 823.298 | 823.234 | 823.848 | 823.888 | 824.388 | 824.823 | 824.874 | 824.826 | 824.888 | 824.883 | 5 |
| 6 | 823.788 | 823.878 | 823.278 | 823.278 | 823.830 | 823.887 | 824.374 | 824.868 | 824.880 | 824.813 | 824.871 | 824.883 | 6 |
| 7 | 823.788 | 823.868 | 823.246 | 823.313 | 823.835 | 823.734 | 824.377 | 824.857 | 824.868 | 824.807 | 824.871 | 824.880 | 7 |
| 8 | 823.778 | 823.880 | 823.173 | 823.331 | 823.833 | 823.737 | 824.388 | 824.848 | 824.882 | 824.801 | 824.880 | 824.880 | 8 |
| 9 | 823.773 | 823.854 | 823.080 | 823.340 | 823.830 | 823.748 | 824.428 | 824.875 | 824.885 | 824.810 | 824.880 | 824.880 | 9 |
| 10 | 823.764 | 823.848 | 823.008 | 823.348 | 823.818 | 823.748 | 824.438 | 824.878 | 824.882 | 824.801 | 824.880 | 824.883 | 10 |
| 11 | 823.788 | 823.842 | 823.084 | 823.383 | 823.818 | 823.778 | 824.483 | 824.882 | 824.888 | 824.810 | 824.877 | 824.880 | 11 |
| 12 | 823.748 | 823.838 | 823.103 | 823.382 | 823.821 | 823.837 | 824.480 | 824.704 | 824.888 | 824.801 | 824.877 | 824.880E | 12 |
| 13 | 823.743 | 823.838 | 823.188 | 823.382 | 823.824 | 823.888 | 824.488 | 824.730 | 824.882 | 824.888 | 824.880 | 824.847E | 13 |
| 14 | 823.737 | 823.817 | 823.208 | 823.417 | 823.830 | 823.907 | 824.802 | 824.733 | 824.880 | 824.882 | 824.877 | 824.844E | 14 |
| 15 | 823.731 | 823.808 | 823.288 | 823.447 | 823.837 | 823.838 | 824.817 | 824.742 | 824.874 | 824.804 | 824.883 | 824.841E | 15 |
| 16 | 823.724 | 823.488 | 823.313 | 823.478 | 823.818 | 823.883 | 824.820 | 824.748 | 824.888 | 824.801 | 824.883 | 824.838E | 16 |
| 17 | 823.718 | 823.487 | 823.388 | 823.487 | 823.824 | 823.877 | 824.823 | 824.782 | 824.871 | 824.888 | 824.883 | 824.838E | 17 |
| 16 | 823.712 | 823.481 | 823.417 | 823.488 | 823.827 | 823.887 | 824.828 | 824.778 | 824.871 | 824.882 | 824.883 | 824.831E | 16 |
| 19 | 823.703 | 823.471 | 823.488 | 823.814 | 823.830 | 823.887 | 824.832 | 824.788 | 824.888 | 824.882 | 824.880 | 824.828E | 19 |
| 20 | 823.884 | 823.488 | 823.487 | 823.832 | 823.838 | 824.008 | 824.838 | 824.788 | 824.871 | 824.882 | 824.880 | 824.828E | 20 |
| 21 | 823.888 | 823.483 | 823.817 | 823.881 | 823.842 | 824.008 | 824.828 | 824.748 | 824.888 | 824.888 | 824.880 | 824.822E | 21 |
| 22 | 823.878 | 823.438 | 823.817 | 823.888 | 823.848 | 824.014 | 824.838 | 824.781 | 824.871 | 824.888 | 824.877 | 824.818E | 22 |
| 23 | 823.873 | 823.428 | 823.487E | 823.884 | 823.838 | 824.030 | 824.832 | 824.787 | 824.883 | 824.888 | 824.883 | 824.818E | 23 |
| 24 | 823.870 | 823.423 | 823.477E | 823.888 | 823.848 | 824.038 | 824.832 | 824.803 | 824.888 | 824.885 | 824.880 | 824.813E | 24 |
| 25 | 823.884 | 823.414 | 823.458E | 823.824 | 823.882 | 824.041 | 824.841 | 824.831 | 824.883 | 824.888 | 824.88C | 824.810E | 25 |
| 26 | 823.867 | 823.404 | 823.438E | 823.830 | 823.878 | 824.078 | 824.841 | 824.852 | 824.841 | 824.888 | 824.877 | 824.807 | 26 |
| 27 | 823.848 | 823.388 | 823.418E | 823.833 | 823.888 | 824.121 | 824.832 | 824.858 | 824.841 | 824.838 | 824.874 | 824.801 | 27 |
| 28 | 823.838 | 823.383 | 823.398E | 823.848 | 823.881 | 824.183 | 824.828 | 824.888 | 824.841 | 824.844 | 824.871 | 824.888 | 28 |
| 29 | 823.830 | | 823.378E | 823.838 | 823.881 | 824.212 | 824.838 | 824.922 | 824.928 | 824.850 | 824.888 | 824.888 | 29 |
| 30 | 823.824 | | 823.368E | 823.830 | 823.884 | 824.248 | 824.841 | 824.928 | 824.928 | 824.852 | 824.882 | 824.888 | 30 |
| 31 | 823.827 | | 823.334E | | 823.884 | | 824.838 | 824.850 | | 824.868 | | 824.888 | 31 |
| MEAN | 823.784 | 823.808 | 823.325 | 823.482 | 823.848 | 823.910 | 824.471 | 824.744 | 824.888 | 824.811 | 824.878 | 824.832 | MEAN |
| MAX | 823.828 | 823.818 | 823.817 | 823.848 | 823.884 | 824.248 | 824.841 | 824.850 | 824.885 | 824.868 | 824.883 | 824.882 | MAX |
| MIN | 823.824 | 823.383 | 823.008 | 823.234 | 823.818 | 823.888 | 824.282 | 824.538 | 824.928 | 824.888 | 824.882 | 824.888 | MIN |

SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MEAN, 824.218
MAXIMUM DAILY, 824.885 ON SEP 9
MINIMUM DAILY, 823.008 ON MAR 10

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 33 51 N
LONG 101 02 05 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1984

DRAINAGE AREA,
528 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1929 ADJ.)

REMARKS - PRIOR TO 1988 PUBLISHED AS "UPPER GRANDVIEW RESERVIOR"

## CADDY LAKE AT CADDY LAKE (CAMPGROUND) - STATION NO. 05PE8A6

DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | 318.883 | --- | 318.288 | --- | 1 |
| 2 | --- | --- | --- | --- | 318.721 | --- | --- | --- | 318.808 | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | 318.878 | 318.348 | --- | --- | 3 |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | --- | --- | --- | --- | --- | --- | 318.838 | 318.235 | --- | --- | 5 |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | 318.814 | --- | --- | --- | 6 |
| 7 | --- | --- | --- | --- | --- | --- | 318.838 | --- | 318.481 | 318.238 | --- | --- | 7 |
| 8 | --- | --- | 318.208 | --- | --- | --- | --- | --- | 318.478 | --- | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 318.813 | --- | --- | --- | 318.481 | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | --- | --- | --- | --- | 318.448 | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | --- | --- | --- | --- | 318.425 | --- | --- | --- | 11 |
| 12 | --- | --- | --- | --- | --- | --- | --- | --- | 318.418 | --- | --- | --- | 12 |
| 13 | --- | --- | --- | --- | --- | --- | --- | --- | 318.408 | --- | --- | --- | 13 |
| 14 | --- | --- | --- | --- | --- | --- | --- | --- | 318.388 | --- | --- | --- | 14 |
| 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 318.474 | --- | --- | 318.348 | --- | --- | --- | --- | 17 |
| 18 | --- | --- | --- | --- | --- | --- | --- | --- | 318.338 | --- | --- | --- | 18 |
| 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | --- | --- | --- | --- | --- | --- | 318.321 | --- | --- | --- | 20 |
| 21 | --- | --- | --- | --- | --- | --- | --- | --- | 318.318 | --- | --- | --- | 21 |
| 22 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | --- | --- | --- | --- | --- | --- | 318.308 | 318.280 | --- | --- | 23 |
| 24 | --- | --- | --- | --- | --- | --- | --- | --- | 318.288 | --- | --- | --- | 24 |
| 25 | --- | --- | --- | 318.807 | --- | --- | --- | 318.738 | --- | --- | --- | --- | 25 |
| 26 | --- | --- | --- | --- | --- | --- | --- | --- | 318.278 | --- | --- | --- | 26 |
| 27 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | --- | --- | --- | --- | --- | 318.748 | 318.280 | --- | --- | --- | 28 |
| 29 | --- | | --- | --- | --- | 319.027 | --- | 318.718 | --- | --- | --- | --- | 29 |
| 30 | --- | | --- | --- | --- | --- | --- | 318.888 | --- | 318.235 | --- | --- | 30 |
| 31 | --- | | --- | | --- | | --- | 318.748 | | --- | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MIN |

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 46 35 N
LONG 95 13 07 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

REGULATED

DRAINAGE AREA,
188 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## CEDAR LAKE NEAR OLESON POINT - STATION NO. OSKL00S

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 285.483 | 285.402 | 284.378 | 283.485 | 283.854 | 284.841 | 284.818 | 284.988 | 285.219 | 285.448 | 285.337 | 284.885 | 1 |
| 2 | 285.494 | 285.387 | 284.333 | 283.435 | 283.704 | 284.881 | 284.817 | 284.970 | 285.227 | 285.493 | 285.385 | 284.854 | 2 |
| 3 | 285.495 | 285.332 | 284.285 | 283.414 | 283.784 | 284.898 | 284.833 | 284.887 | 285.235 | 285.478 | 285.397 | 284.834 | 3 |
| 4 | 285.500 | 285.294 | 284.234 | 283.388 | 283.827 | 284.888 | 284.841 | 284.972 | 285.237 | 285.478 | 285.328 | 284.884 | 4 |
| 5 | 285.500 | 285.259 | 284.182 | 283.380 | 283.882 | 284.883 | 284.848 | 284.883 | 285.265 | 285.488 | 285.338 | 284.893 | 5 |
| 6 | 285.481 | 285.220 | 284.139 | 283.388 | 283.938 | 284.704 | 284.840 | 284.887 | 285.258 | 285.473 | 285.337 | 284.881 | 6 |
| 7 | 285.487 | 285.188 | 284.084 | 283.387 | 284.007 | 284.698 | 284.829 | 284.898 | 285.238 | 285.433 | 285.328 | 284.885 | 7 |
| 8 | 285.488 | 285.128 | 284.080 | 283.348 | 284.084 | 284.708 | 284.831 | 285.013 | 285.273 | 285.403 | 285.335 | 284.848 | 8 |
| 9 | 285.487 | 285.084 | 284.021 | 283.340 | 284.123 | 284.718 | 284.839 | 285.023 | 285.285 | 285.388 | 285.342 | 284.842 | 9 |
| 10 | 285.481 | 285.052 | 283.984 | 283.333 | 284.189 | 284.728 | 284.834 | 285.027 | 285.318 | 285.379 | 285.312 | 284.840 | 10 |
| 11 | 285.483 | 285.011 | 283.978 | 283.327 | 284.242 | 284.727 | 284.828 | 285.035 | 285.338 | 285.388 | 285.300 | 284.838 | 11 |
| 12 | 285.412 | 285.000 | 283.870 | 283.328 | 284.277 | 284.748 | 284.816 | 285.031 | 285.331 | 285.371 | 285.330 | 284.834 | 12 |
| 13 | 285.416 | 284.982 | 283.886 | 283.321 | 284.309 | 284.783 | 284.828 | 285.028 | 285.348 | 285.381 | 285.341 | 284.804 | 13 |
| 14 | 285.412 | 284.971 | 283.827 | 283.320 | 284.341 | 284.785 | 284.833 | 285.028 | 285.367 | 285.336 | 285.341 | 284.782 | 14 |
| 15 | 285.410 | 284.940 | 283.887 | 283.322 | 284.371 | 284.770 | 284.842 | 285.038 | 285.380 | 285.312 | 285.334 | 284.758 | 15 |
| 16 | 285.414 | 284.902 | 283.887 | 283.323 | 284.388 | 284.781 | 284.845 | 285.048 | 285.388 | 285.300 | 285.307 | 284.743 | 16 |
| 17 | 285.417 | 284.858 | 283.837 | 283.327 | 284.412 | 284.782 | 284.848 | 285.048 | 285.370 | 285.288 | 285.271 | 284.741 | 17 |
| 18 | 285.421 | 284.831 | 283.808 | 283.327 | 284.439 | 284.800 | 284.846 | 285.071 | 285.388 | 285.284 | 285.238 | 284.732 | 18 |
| 19 | 285.420 | 284.780 | 283.772 | 283.328 | 284.468 | 284.809 | 284.847 | 285.088 | 285.383 | 285.287 | 285.217 | 285.701 | 19 |
| 20 | 285.420 | 284.740 | 283.738 | 283.347 | 284.478 | 284.808 | 284.848 | 285.088 | 285.391 | 285.303 | 285.188 | 284.698 | 20 |
| 21 | 285.426 | 284.883 | 283.703 | 283.384 | 284.504 | 284.820 | 284.829 | 285.087 | 285.388 | 285.287 | 285.173 | 284.637 | 21 |
| 22 | 285.426 | 284.851 | 283.688 | 283.384 | 284.525 | 284.825 | 284.821 | 285.113 | 285.415 | 285.308 | 285.188 | 284.601 | 22 |
| 23 | 285.423 | 284.807 | 283.839 | 283.416 | 284.543 | 284.818 | 284.828 | 285.098 | 285.417 | 285.315 | 285.188 | 284.598 | 23 |
| 24 | 285.427 | 284.575 | 283.807 | 283.443 | 284.547 | 284.828 | 284.830 | 285.082 | 285.405 | 285.307 | 285.180 | 284.535 | 24 |
| 25 | 285.438 | 284.543 | 283.877 | 283.484 | 284.568 | 284.828 | 284.828 | 285.108 | 285.440 | 285.314 | 285.143 | 284.517 | 25 |
| 26 | 285.444 | 284.510 | 283.848 | 283.481 | 284.578 | 284.878 | 284.833 | 285.128 | 285.433 | 285.323 | 285.124 | 284.511 | 26 |
| 27 | 285.447 | 284.473 | 283.528 | 283.518 | 284.588 | 284.888 | 284.842 | 285.187 | 285.434 | 285.334 | 285.114 | 284.488 | 27 |
| 28 | 285.443 | 284.423 | 283.511 | 283.548 | 284.601 | 284.911 | 284.844 | 285.188 | 285.443 | 285.381 | 285.098 | 284.492 | 28 |
| 29 | 285.448 | | 283.503 | 283.577 | 284.601 | 284.888 | 284.868 | 285.188 | 285.454 | 285.385 | 285.072 | 284.488 | 29 |
| 30 | 285.443 | | 283.490 | 283.611 | 284.613 | 284.907 | 284.858 | 285.208 | 285.458 | 285.384 | 285.038 | 284.504 | 30 |
| 31 | 285.431 | | 283.473 | | 284.628 | | 284.884 | 285.214 | | 285.348 | | 284.501 | 31 |
| MEAN | 285.447 | 284.822 | 283.881 | 283.387 | 284.285 | 284.773 | 284.838 | 285.083 | 285.348 | 285.382 | 285.248 | 284.720 | MEAN |
| MAX | 285.500 | 285.402 | 284.378 | 283.611 | 284.628 | 284.911 | 284.888 | 285.214 | 285.458 | 285.478 | 285.387 | 284.885 | MAX |
| MIN | 285.410 | 284.423 | 283.473 | 283.320 | 283.854 | 284.641 | 284.816 | 284.887 | 285.219 | 285.287 | 285.038 | 284.492 | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MEAN, 284.781
MAXIMUM DAILY, 285.500 ON JAN 4
MINIMUM DAILY, 283.320 ON APR 14
MAXIMUM INSTANTANEOUS,
285.540 AT 21:12 CST ON OCT 5

TYPE OF GAUGE - RECORDING
LOCATION - LAT 53 19 33 N
LONG 100 15 00 W

REGULATED

DRAINAGE AREA,
384 000 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1971 ADJ.)

## CHILDS LAKE NEAR BOGGY CREEK - STATION NO. OSMD00S

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | 1.438 | 1.442 | 1.447 | 1.518 | 1.458 | 1.485 | 1.418 | --- | --- | 1 |
| 2 | --- | --- | --- | 1.442 | 1.441 | 1.447 | 1.517 | 1.457 | 1.483 | 1.414 | --- | --- | 2 |
| 3 | --- | --- | --- | 1.444 | 1.440 | 1.445 | 1.513 | 1.477 | 1.488 | 1.407 | --- | --- | 3 |
| 4 | --- | --- | --- | 1.441 | 1.442 | 1.440 | 1.510 | 1.480 | 1.487 | 1.404 | --- | --- | 4 |
| 5 | --- | --- | --- | 1.438 | 1.445 | 1.441 | 1.510 | 1.485 | 1.486 | 1.403 | --- | --- | 5 |
| 6 | --- | --- | --- | 1.438 | 1.443 | 1.451 | 1.508 | 1.477 | 1.483 | 1.397 | --- | --- | 6 |
| 7 | --- | --- | --- | 1.440 | 1.441 | 1.470 | 1.504 | 1.477 | 1.488 | 1.393 | --- | --- | 7 |
| 8 | --- | --- | --- | 1.440 | 1.442 | 1.486 | 1.506 | 1.472 | 1.488 | 1.393 | --- | --- | 8 |
| 9 | --- | --- | --- | 1.440 | 1.442 | 1.482 | 1.518 | 1.488 | 1.482 | 1.388 | --- | --- | 9 |
| 10 | --- | --- | --- | 1.440 | 1.441 | 1.482 | 1.521 | 1.488 | 1.478 | 1.387 | --- | --- | 10 |
| 11 | --- | --- | --- | 1.440 | 1.438 | 1.478 | 1.520 | 1.488 | 1.471 | 1.383 | --- | --- | 11 |
| 12 | --- | --- | --- | 1.438 | 1.438 | 1.503 | 1.518 | 1.484 | 1.467 | 1.380 | --- | --- | 12 |
| 13 | --- | --- | --- | 1.436 | 1.437 | 1.510 | 1.518 | 1.483 | 1.460 | 1.380 | --- | --- | 13 |
| 14 | --- | --- | --- | 1.434 | 1.438 | 1.507 | 1.513 | 1.472 | 1.480 | 1.382 | --- | --- | 14 |
| 15 | --- | --- | --- | 1.434 | 1.438 | 1.503 | 1.511 | 1.470 | 1.488 | 1.388 | --- | --- | 15 |
| 16 | --- | --- | --- | 1.436 | 1.438 | 1.488 | 1.508 | 1.486 | 1.486 | 1.387 | --- | --- | 16 |
| 17 | --- | --- | --- | 1.434 | 1.437 | 1.488 | 1.507 | 1.483 | 1.483 | 1.388 | --- | --- | 17 |
| 18 | --- | --- | --- | 1.434 | 1.437 | 1.487 | 1.508 | 1.484 | 1.484 | 1.380 | --- | --- | 18 |
| 19 | --- | --- | --- | 1.438 | 1.442 | 1.487 | 1.501 | 1.482 | 1.484 | 1.378 | --- | --- | 19 |
| 20 | --- | --- | --- | 1.448 | 1.443 | 1.494 | 1.500A | 1.488 | 1.488 | 1.378 | --- | --- | 20 |
| 21 | --- | --- | --- | 1.451 | 1.441 | 1.493 | 1.495E | 1.486 | 1.482 | 1.373 | --- | --- | 21 |
| 22 | --- | --- | --- | 1.456 | 1.438 | 1.493 | 1.491E | 1.483 | 1.447 | 1.373 | --- | --- | 22 |
| 23 | --- | --- | --- | 1.458 | 1.437 | 1.492 | 1.488E | 1.480 | 1.438 | 1.370 | --- | --- | 23 |
| 24 | --- | --- | --- | 1.456 | 1.448 | 1.490 | 1.483E | 1.480 | 1.434 | 1.371 | --- | --- | 24 |
| 25 | --- | --- | --- | 1.456 | 1.481 | 1.491 | 1.477A | 1.486 | 1.438 | 1.371 | --- | --- | 25 |
| 26 | --- | --- | --- | 1.458 | 1.488 | 1.506 | 1.473 | 1.487 | 1.437 | 1.371 | --- | --- | 26 |
| 27 | --- | --- | --- | 1.483 | 1.488 | 1.524 | 1.487 | 1.488 | 1.438 | 1.384 | --- | --- | 27 |
| 28 | --- | --- | 1.431A | 1.448 | 1.488 | 1.521 | 1.482 | 1.473 | 1.434 | 1.388 | --- | --- | 28 |
| 28 | --- | --- | 1.431E | 1.443 | 1.483 | 1.520 | 1.488 | 1.483 | 1.430 | 1.387 | --- | --- | 29 |
| 30 | --- | --- | 1.431E | 1.443 | 1.481 | 1.520 | 1.480 | 1.480 | 1.418 | 1.388 | --- | --- | 30 |
| 31 | --- | --- | 1.431A | | 1.448 | | 1.493 | 1.488 | | 1.384 | --- | --- | 31 |
| MEAN | --- | --- | --- | 1.443 | 1.443 | 1.488 | 1.498 | 1.470 | 1.458 | 1.388 | --- | --- | MEAN |
| MAX | --- | --- | --- | 1.456 | 1.481 | 1.524 | 1.521 | 1.493 | 1.488 | 1.418 | --- | --- | MAX |
| MIN | --- | --- | --- | 1.434 | 1.438 | 1.440 | 1.488 | 1.480 | 1.418 | 1.378 | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MAXIMUM DAILY, 1.524 ON JUN 27
MINIMUM DAILY, 1.378 ON OCT 33
MAXIMUM INSTANTANEOUS,
1.530 AT 22:30 CST ON JUN 27

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 34 37 N
LONG 101 01 54 W

A - MANUAL GAUGE

E - ESTIMATED

NATURAL FLOW

DRAINAGE AREA,
87.6 km²

WATER LEVELS ARE REFERRED TO ASSUMED DATUM

## CHURCHILL RIVER ABOVE GRANVILLE FALLS - STATION NO. 05EA005

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 881 | 880E | 844E | 834 | 886 | 788 | 727 | 873 | 887 | 830 | 884 | 852 | 1 |
| 2 | 882 | 878E | 845E | 832 | 804 | 780 | 727 | 874 | 885 | 832 | 885 | 853 | 2 |
| 3 | 884 | 878E | 848E | 830 | 813 | 789 | 722 | 875 | 884 | 834 | 872 | 881 | 3 |
| 4 | 892 | 878E | 848E | 828 | 821 | 792 | 720 | 878 | 890 | 838 | 872 | 884 | 4 |
| 5 | 892 | 878E | 847E | 828 | 832 | 795 | 714 | 878 | 885 | 833 | 871 | 881 | 5 |
| 6 | 888A | 878E | 848E | 823 | 840 | 784 | 712 | 877 | 883 | 827 | 870 | 859A | 6 |
| 7 | 888E | 878E | 850E | 820 | 850 | 787 | 708 | 878 | 881 | 832 | 870 | 859E | 7 |
| 8 | 888E | 878E | 852E | 818 | 888A | 788 | 703 | 880 | 878 | 837 | 868 | 859E | 8 |
| 9 | 890E | 878E | 853E | 814 | 873A | 784 | 697 | 882 | 870 | 838 | 868 | 856E | 9 |
| 10 | 891E | 878E | 858E | 812 | 878 | 781 | 692 | 884 | 887 | 841 | 865 | 858E | 10 |
| 11 | 891E | 877E | 857E | 808 | 888 | 780 | 881 | 885 | 885 | 843 | 864 | 858E | 11 |
| 12 | 893E | 877E | 858E | 808 | 894 | 784 | 880 | 882 | 888 | 838 | 858 | 856E | 12 |
| 13 | 891E | 878E | 902E | 803 | 891 | 783 | 888 | 882 | 885 | 841 | 855 | 859E | 13 |
| 14 | 891E | 878E | 904E | 801 | 893 | 779 | 885 | 883 | 883 | 843 | 851 | 859E | 14 |
| 15 | 890E | 878E | 908E | 898 | 884 | 778 | 885 | 885 | 882 | 848 | 850 | 891E | 15 |
| 16 | 888E | 878E | 908E | 895 | 702 | 789 | 884 | 886 | 888 | 848 | 848 | 863E | 16 |
| 17 | 889E | 878E | 913E | 883 | 708 | 783 | 882 | 887 | 888 | 852 | 848 | 863E | 17 |
| 18 | 889E | 878E | 918E | 880 | 718 | 786 | 881 | 887 | 887 | 880 | 843 | 864E | 18 |
| 19 | 890E | 878E | 919E | 887 | 718 | 782 | 880 | 888 | 888 | 884 | 844 | 885E | 19 |
| 20 | 888E | 877E | 920E | 886 | 731 | 780 | 878 | 885 | 884 | 880 | 843 | 887E | 20 |
| 21 | 888E | 878E | 924E | 883 | 748 | 740 | 880 | 885 | 886 | 884 | 842 | 870E | 21 |
| 22 | 888E | 878E | 928E | 885 | 784 | 738 | 879 | 882 | 842 | 852 | 841 | 872E | 22 |
| 23 | 887E | 879E | 928E | 884 | 785 | 735 | 878 | 884 | 881 | 884 | 838 | 874E | 23 |
| 24 | 886E | 879E | 930E | 880 | 785 | 718 | 870 | 885 | 850 | 883 | 838 | 875E | 24 |
| 25 | 885E | 880E | 932E | 880 | 781 | 713 | 872 | 888 | 840 | 884 | 838 | 878E | 25 |
| 26 | 884E | 881E | 934E | 888 | 785 | 713 | 888 | 887 | 845 | 886 | 840 | 880E | 26 |
| 27 | 884E | 881E | 935E | 884 | 788 | 714 | 887 | 700 | 844 | 880 | 840 | 883E | 27 |
| 28 | 883E | 882E | 938A | 883 | 772 | 721 | 884 | 888 | 838 | 886 | 842 | 888E | 28 |
| 29 | 881E | | 938 | 880 | 780 | 728 | 889 | 701 | 834 | 871 | 846 | 888E | 29 |
| 30 | 881E | | 938 | 883 | 783 | 727 | 870 | 700 | 833 | 873 | 847 | 888E | 30 |
| 31 | 880E | | 938 | | 788 | | 870 | 888 | | 870 | | 888E | 31 |
| TOTAL | 18 237 | 16 176 | 18 923 | 18 067 | 21 857 | 22 885 | 21 352 | 21 285 | 19 874 | 20 170 | 19 808 | 20 882 | TOTAL |
| MEAN | 886 | 878 | 810 | 803 | 705 | 782 | 888 | 886 | 882 | 851 | 854 | 887 | MEAN |
| MAX | 894 | 882 | 938 | 834 | 788 | 788 | 727 | 701 | 887 | 873 | 872 | 888 | MAX |
| MIN | 880 | 875 | 884 | 883 | 888 | 713 | 868 | 873 | 833 | 827 | 838 | 852 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 885
MAXIMUM DAILY, 788 ON JUN 8
MINIMUM DAILY, 8788 ON FEB 8
MAXIMUM INSTANTANEOUS,
805 AT 15:10 CST ON JUN 8

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 58 08 00 N
LONG 100 27 30 W
DRAINAGE AREA, 230 000 km²
A - MANUAL GAUGE

E - ESTIMATED
REGULATED SINCE 1928

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 1 880 000 | JUL | 1 840 000 |
| FEB | 1 400 000 | AUG | 1 840 000 |
| MAR | 1 830 000 | SEP | 1 720 000 |
| APR | 1 880 000 | OCT | 1 740 000 |
| MAY | 1 880 000 | NOV | 1 880 000 |
| JUN | 1 880 000 | DEC | 1 780 000 |

TOTAL DISCHARGE, 20 700 000 dam³

## CHURCHILL RIVER ABOVE LEAF RAPIDS - STATION NO. 05EB004

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 884 | 845 | 844 | 858 | 833 | 890 | 1 010 | 878 | 805 | 784 | 781 | 784 | 1 |
| 2 | 882 | 844 | 845 | 858 | 837 | 888 | 1 010 | 888 | 803 | 781 | 778 | 788 | 2 |
| 3 | 884 | 843 | 845 | 858 | 843 | 887 | 1 020 | 880 | 788 | 781 | 777 | 789 | 3 |
| 4 | 882 | 842 | 848 | 858 | 848 | 1 000 | 1 020 | 880 | 805 | 788 | 780 | 771 | 4 |
| 5 | 883 | 842 | 847 | 856 | 852 | 1 010 | 1 010 | 887 | 803 | 788 | 782 | 788 | 5 |
| 6 | 882 | 842 | 848 | 857 | 881 | 1 000 | 1 020 | 885 | 788 | 785 | 780 | 784 | 6 |
| 7 | 881 | 838 | 849 | 856 | 871 | 1 010 | 1 010 | 882 | 804 | 784 | 783 | 782 | 7 |
| 8 | 880 | 840 | 852 | 853 | 882 | 1 010 | 1 000 | 858 | 808 | 784 | 782 | 782 | 8 |
| 9 | 888 | 840 | 853 | 852 | 882 | 1 000 | 888 | 854 | 807 | 785 | 782 | 781 | 9 |
| 10 | 888 | 840 | 853 | 851 | 708 | 1 000 | 888 | 850 | 800 | 784 | 780 | 780 | 10 |
| 11 | 888 | 840 | 852 | 848 | 718 | 1 010 | 882 | 848 | 804 | 788 | 788 | 781 | 11 |
| 12 | 888 | 838 | 853 | 848 | 733 | 1 010 | 888 | 838 | 804 | 788 | 788 | 782 | 12 |
| 13 | 888 | 841 | 853 | 847 | 748 | 1 020 | 883 | 841 | 798 | 783 | 782 | 783 | 13 |
| 14 | 887 | 841 | 856 | 848 | 788 | 1 020 | 877 | 840 | 783 | 783 | 780 | 788 | 14 |
| 15 | 885 | 840 | 855 | 842 | 788 | 1 020 | 871 | 834 | 781 | 783 | 778 | 788 | 15 |
| 16 | 884 | 838 | 886 | 841 | 778 | 1 010 | 887 | 830 | 784 | 788 | 778 | 787 | 16 |
| 17 | 882 | 838 | 857 | 838 | 788 | 1 010 | 888 | 828 | 784 | 788 | 778 | 788 | 17 |
| 18 | 884 | 838 | 858 | 838 | 808 | 1 020 | 888 | 818 | 788 | 782 | 771 | 788 | 18 |
| 19 | 884 | 838 | 858 | 838 | 808 | 1 010 | 883 | 818 | 782 | 788 | 772 | 788 | 18 |
| 20 | 882 | 838 | 857 | 832 | 830 | 1 020 | 844 | 832 | 788 | 788 | 772 | 778 | 20 |
| 21 | 884 | 840 | 857 | 828 | 857 | 1 020 | 834 | 812 | 778 | 787 | 778 | 771 | 21 |
| 22 | 886 | 840 | 858 | 828 | 878 | 1 000 | 838 | 803 | 777 | 788 | 788 | 778 | 22 |
| 23 | 886 | 840 | 857 | 838 | 881 | 885 | 838 | 808 | 777 | 781 | 788 | 773 | 23 |
| 24 | 883 | 841 | 857 | 838 | 808 | 881 | 815 | 814 | 773 | 788 | 783 | 771 | 24 |
| 25 | 882 | 843 | 858 | 838 | 813 | 881 | 813 | 815 | 788 | 783 | 783 | 774 | 25 |
| 26 | 881 | 841 | 858 | 833 | 828 | 888 | 808 | 817 | 788 | 780 | 782 | 773 | 26 |
| 27 | 880 | 843 | 858 | 833 | 838 | 886 | 805 | 817 | 788 | 748 | 782 | 776 | 27 |
| 28 | 848 | 844 | 859 | 831 | 881 | 888 | 888 | 811 | 787 | 778 | 788 | 778 | 28 |
| 29 | 848 | | 858 | 830 | 872 | 1 010 | 881 | 810 | 788 | 788 | 781 | 778 | 29 |
| 30 | 847 | | 858 | 831 | 880 | 1 000 | 880 | 810 | 782 | 788 | 780 | 778 | 30 |
| 31 | 848 | | 880 | | 881 | | 881 | 808 | | 778 | | 777 | 31 |
| TOTAL | 20 330 | 17 848 | 20 288 | 18 308 | 24 870 | 30 183 | 28 784 | 25 880 | 23 822 | 23 844 | 23 318 | 23 817 | TOTAL |
| MEAN | 888 | 841 | 884 | 844 | 783 | 1 010 | 881 | 834 | 787 | 788 | 774 | 788 | MEAN |
| MAX | 884 | 845 | 880 | 858 | 881 | 1 020 | 1 020 | 878 | 807 | 782 | 788 | 778 | MAX |
| MIN | 848 | 838 | 844 | 828 | 833 | 888 | 881 | 803 | 782 | 748 | 788 | 780 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 774
MAXIMUM DAILY, 1 020 ON JUN 13
MINIMUM DAILY, 828 ON APR 21
MAXIMUM INSTANTANEOUS,
1 040 AT 15:55 CST ON JUN 20

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 58 28 37 N
LONG 100 02 85 W
DRAINAGE AREA, 244 000 km²

REGULATED SINCE 1928

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 1 780 000 | JUL | 2 870 000 |
| FEB | 1 850 000 | AUG | 2 230 000 |
| MAR | 1 780 000 | SEP | 2 040 000 |
| APR | 1 870 000 | OCT | 2 030 000 |
| MAY | 2 130 000 | NOV | 2 010 000 |
| JUN | 2 810 000 | DEC | 2 080 000 |

TOTAL DISCHARGE, 24 400 000 dam³

## CHURCHILL RIVER ABOVE RED HEAD RAPIDS - STATION NO. 05FD001

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1808 | 1118 | 1088 | 88.88 | 72.98 | --- | --- | --- | --- | --- | 113 | 1878 | 1 |
| 2 | 1808 | 1118 | 1088 | 84.88 | 73.78 | --- | --- | --- | --- | --- | 1088 | 1888 | 2 |
| 3 | 1808 | 1108 | 1088 | 88.48 | 72.88 | --- | --- | --- | --- | --- | 1088 | 1648 | 3 |
| 4 | 1808 | 1108 | 1088 | 83.08 | 72.18 | --- | --- | --- | --- | 134A | 1128 | 1618 | 4 |
| 5 | 1808 | 1108 | 1088 | 81.28 | 71.88 | --- | --- | --- | --- | --- | 1188 | 1508 | 5 |
| 6 | 1808 | 1108 | 1078 | 80.78 | --- | --- | --- | --- | --- | 133 | 1318 | 1488 | 6 |
| 7 | 1808 | 1108 | 1078 | 78.38 | --- | --- | --- | --- | --- | 131 | 1518 | 1488 | 7 |
| 8 | 1808 | 1108 | 1078 | 78.88 | --- | --- | --- | --- | --- | 133 | 1888 | 1478 | 8 |
| 9 | 1808 | 1108 | 1078 | 78.38 | --- | --- | --- | --- | --- | 130 | 1838 | 1478 | 9 |
| 10 | 1808 | 1108 | 1078 | 77.88 | --- | --- | --- | --- | --- | 128 | 1918 | 1488 | 10 |
| 11 | 1808 | 1108 | 1078 | 77.38 | --- | --- | --- | --- | --- | 130 | 1938 | 1488 | 11 |
| 12 | 1808 | 1108 | 1078 | 77.08 | --- | --- | --- | --- | --- | 131 | 1928 | 1448 | 12 |
| 13 | 1808 | 1108 | 1078 | 78.58 | --- | --- | --- | --- | --- | 124 | 1828 | 1448 | 13 |
| 14 | 1808 | 1108 | 1078 | 76.48 | --- | --- | --- | --- | --- | 135 | 1928 | 1438 | 14 |
| 15 | 1808 | 1108 | 1078 | 76.38 | --- | --- | --- | --- | --- | 128 | 1928 | 1438 | 15 |
| 16 | 1808 | 1108 | 1078 | 76.08 | --- | --- | --- | --- | --- | 123 | 1928 | 1428 | 16 |
| 17 | 1808 | 1088 | 1078 | 75.88 | --- | --- | --- | --- | --- | 121 | 1918 | 1428 | 17 |
| 18 | 1808 | 1088 | 1078 | 75.58 | --- | --- | 372A | --- | --- | 128 | 1888 | 1418 | 18 |
| 19 | 1888 | 1088 | 1078 | 75.38 | --- | --- | --- | --- | --- | 131 | 1848 | 1408 | 19 |
| 20 | 1888 | 1088 | 1078 | 75.08 | --- | --- | --- | --- | --- | 127 | 1858 | 1388 | 20 |
| 21 | 1878 | 1088 | 1078 | 74.88 | --- | --- | --- | --- | --- | 125 | 1858 | 1388 | 21 |
| 22 | 1858 | 1088 | 1068 | 74.58 | --- | --- | --- | --- | --- | 118 | 1858 | 1388 | 22 |
| 23 | 1818 | 1088 | 1068 | 74.38 | --- | --- | --- | --- | --- | 117 | 1838 | 1388 | 23 |
| 24 | 1468 | 1088 | 1068 | 74.48 | --- | --- | --- | --- | --- | 117 | 1828 | 1388 | 24 |
| 25 | 1388 | 1088 | 1068 | 74.28 | --- | --- | --- | --- | --- | 118 | 1808 | 1388 | 25 |
| 26 | 1318 | 1088 | 1068 | 74.08 | --- | --- | --- | --- | --- | 122 | 1778 | 1388 | 26 |
| 27 | 1238 | 1088 | 1048 | 73.78 | --- | --- | --- | --- | --- | 126 | 1738 | 1388 | 27 |
| 28 | 1188 | 1088 | 1048 | 73.48 | --- | --- | --- | --- | --- | 129 | 1688 | 1378 | 28 |
| 29 | 1168 | | 1038 | 73.38 | --- | --- | --- | --- | --- | 143 | 1638 | 1378 | 29 |
| 30 | 1148 | | 1028 | 73.18 | 1 100 A | --- | --- | --- | --- | 158 | 1608 | 1388 | 30 |
| 31 | 1138 | | 1008 | | 1 030 A | | | --- | --- | 136 | | 1388 | 31 |
| TOTAL | 4 881 | 3 070 | 3 282 | 2 343.3 | --- | --- | --- | --- | --- | --- | 5 049 | 4 443 | TOTAL |
| MEAN | 158 | 110 | 106 | 78.1 | --- | --- | --- | --- | --- | --- | 168 | 143 | MEAN |
| MAX | 180 | 111 | 108 | 88.8 | --- | --- | --- | --- | --- | --- | 182 | 167 | MAX |
| MIN | 113 | 108 | 100 | 73.1 | --- | --- | --- | --- | --- | --- | 109 | 136 | MIN |

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 58 07 18 N
LONG 94 37 30 W
DRAINAGE AREA, 287 000 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

REGULATED SINCE 1928

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 403 000 | JUL | --- |
| FEB | 285 000 | AUG | --- |
| MAR | 284 000 | SEP | --- |
| APR | 202 000 | OCT | --- |
| MAY | --- | NOV | 438 000 |
| JUN | --- | DEC | 384 000 |

## CHURCHILL RIVER BELOW FIDLER LAKE - STATION NO. 05FB001

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1388 | 113 B | 80.08 | 54.08 | 55.58 | 337 | 217 | 88.0 | 88.0 | 70.5 | 188 | 138 B | 1 |
| 2 | 1368 | 111 B | 78.08 | 53.58 | 58.08 | 328 | 212 | 84.8 | 88.8 | 88.8 | 184 | 133 B | 2 |
| 3 | 1358 | 111 B | 78.08 | 53.58 | 57.08 | 320 | 207 | 80.7 | 84.8 | 84.5 | 178 | 132 B | 3 |
| 4 | 1368 | 110 B | 78.58 | 53.58 | 58.08 | 314 | 203 | 88.5 | 88.3 | 88.2 | 1788 | 130 B | 4 |
| 5 | 1348 | 108 B | 78.08 | 53.58 | 58.08 | 308 | 197 | 88.3 | 87.6 | 88.3 | 1778 | 128 B | 5 |
| 6 | 1348 | 108 B | 74.08 | 53.08 | 60.58 | 286 | 184 | 87.1 | 87.7 | 87.4A | 1788 | 128 B | 6 |
| 7 | 1348 | 107 B | 72.08 | 53.08 | 62.08 | 288 | 188 | 84.8 | 85.8 | 87.3 | 1808 | 128 B | 7 |
| 8 | 1348 | 108 B | 70.58 | 53.08 | 64.08 | 280 | 184 | 82.2 | 85.8 | 88.4 | 1818 | 124 B | 8 |
| 9 | 1348 | 105 B | 68.58 | 53.08 | 66.08 | 268 | 178 | 80.2 | 85.0 | 84.3 | 1818 | 122 B | 9 |
| 10 | 1348 | 104 B | 67.88 | 53.08 | 72.08 | 262 | 174 | 77.8 | 82.7 | 84.0 | 1828 | 121 B | 10 |
| 11 | 1348 | 103 B | 66.08 | 53.08 | 80.08 | 253 | 171 | 75.8 | 83.4 | 86.1 | 1838 | 118 B | 11 |
| 12 | 1348 | 102 B | 65.08 | 53.58 | 128 B | 248 | 184 | 74.3 | 82.8 | 83.4 | 1828 | 116 B | 12 |
| 13 | 1348 | 101 B | 64.08 | 53.58 | 178 B | 239 | 158 | 74.0 | 79.5 | 83.8 | 1818 | 116 B | 13 |
| 14 | 1238 | 100 B | 63.58 | 53.58 | 238 B | 232 | 184 | 72.7 | 78.0 | 82.8 | 1808 | 116 B | 14 |
| 15 | 1338 | 98.08 | 62.58 | 53.58 | 263 | 224 | 150 | 70.8 | 77.7 | 82.2 | 1788 | 114 B | 15 |
| 16 | 1328 | 97.58 | 62.08 | 53.58 | 287 | 217 | 146 | 88.4 | 77.1 | 81.4 | 1788 | 112 B | 16 |
| 17 | 1318 | 96.08 | 61.08 | 54.08 | 280 | 208 | 143 | 87.3 | 78.2 | 81.4 | 1748 | 111 B | 17 |
| 18 | 1308 | 95.58 | 60.08 | 54.08 | 300 | 222 | 138 | 88.7 | 78.8 | 81.5 | 1708 | 110 B | 18 |
| 19 | 1288 | 94.08 | 59.58 | 54.08 | 318 | 240 | 136 | 88.2 | 78.5 | 81.8 | 1678 | 108 B | 19 |
| 20 | 1268 | 93.08 | 58.08 | 54.08 | 328 | 280 | 132 | 88.3 | 74.8 | 82.4 | 1638 | 108 B | 20 |
| 21 | 1248 | 92.08 | 56.08 | 54.08 | 344 | 256 | 128 | 83.3 | 74.8 | 88.3 | 1608 | 107 B | 21 |
| 22 | 1228 | 91.58 | 57.58 | 54.08 | 358 | 258 | 128 | 81.7 | 76.1 | 73.8 | 1588 | 106 B | 22 |
| 23 | 1218 | 89.08 | 57.08 | 54.08 | 364 | 261 | 122 | 80.4 | 77.5 | 83.1 | 1538 | 104 B | 23 |
| 24 | 1198 | 88.08 | 56.58 | 54.58 | 370 | 258 | 118 | 88.4 | 78.2 | 82.4 | 1518 | 104 B | 24 |
| 25 | 1168 | 87.08 | 56.08 | 54.58 | 368 | 256 | 113 | 83.0 | 74.3 | 102 | 1468 | 103 B | 25 |
| 26 | 1158 | 86.08 | 56.08 | 54.58 | 388 | 250 | 112 | 78.5 | 75.1 | 110 | 1468 | 102 B | 26 |
| 27 | 1178 | 84.08 | 55.58 | 54.58 | 368 | 248 | 113 | 87.5 | 76.8 | 118 | 1448 | 101 B | 27 |
| 28 | 1158 | 83.08 | 56.08 | 54.58 | 363 | 236 | 110 | 88.7 | 72.7 | 138 | 1418 | 98.58 | 28 |
| 29 | 1158 | | 54.58 | 54.58 | 358 | 231 | 108 | 88.1 | 72.8 | 137 | 1388 | 98.08 | 29 |
| 30 | 1158 | | 54.58 | 55.08 | 353 | 224 | 104 | 86.6 | 72.1 | 142 | 1378 | 96.08 | 30 |
| 31 | 1138 | | 54.08 | | 348 | | 101 | 86.7 | | 147 | | 97.08 | 31 |
| TOTAL | 3 857 | 2 785.5 | 1 976.0 | 1 613.6 | 8 936.0 | 7 811 | 4 703 | 2 403.8 | 2 388.5 | 2 488.8 | 4 872 | 3 827.5 | TOTAL |
| MEAN | 126 | 96.8 | 63.8 | 52.8 | 224 | 260 | 152 | 77.5 | 78.8 | 80.5 | 188 | 114 | MEAN |
| MAX | 136 | 113 | 80.0 | 55.0 | 370 | 337 | 217 | 88.0 | 88.0 | 147 | 183 | 138 | MAX |
| MIN | 113 | 83.0 | 54.0 | 53.0 | 88.5 | 308 | 101 | 86.4 | 72.1 | 81.4 | 137 | 97.0 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 135
MAXIMUM DAILY, 370 ON MAY 24
MINIMUM DAILY, 53.08 ON APR 6
MAXIMUM INSTANTANEOUS,
371 AT 15:05 CST ON MAY 24

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 57 15 00 N
LONG 94 47 50 W
DRAINAGE AREA, 271 000 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

REGULATED SINCE 1928

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 342 000 | JUL | 406 000 |
| FEB | 230 000 | AUG | 306 000 |
| MAR | 171 000 | SEP | 207 000 |
| APR | 138 000 | OCT | 216 000 |
| MAY | 883 000 | NOV | 430 000 |
| JUN | 676 000 | DEC | 308 000 |

TOTAL DISCHARGE, 3 840 000 dam³

## CLEARWATER LAKE AT GUY HILL - STATION NO. 05KK009

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 259.719 | 259.728 | 259.749 | 259.750 | 259.756 | 259.786 | 259.888 | 259.867 | 259.854 | 259.837 | 259.790 | 259.790 | 1 |
| 2 | 259.723 | 259.728 | 259.747 | 259.750 | 259.754 | 259.784 | 259.901 | 259.886 | 259.854 | 259.822 | 259.780 | 259.788 | 2 |
| 3 | 259.724 | 259.726 | 259.747 | 259.750 | 259.755 | 259.796 | 259.903 | 259.886 | 259.853 | 259.812 | 259.778 | 259.788 | 3 |
| 4 | 259.728 | 259.731 | 259.746 | 259.750 | 259.757 | 259.793 | 259.906 | 259.892 | 259.855 | 259.810 | 259.783 | 259.787 | 4 |
| 5 | 259.734 | 259.731 | 259.747 | 259.750 | 259.756 | 259.793 | 259.911 | 259.892 | 259.852 | 259.818 | 259.780 | 259.786 | 5 |
| 6 | 259.723 | 259.732 | 259.748 | 259.748 | 259.755 | 259.792 | 259.906 | 259.886 | 259.857 | 259.811 | 259.778 | 259.787 | 6 |
| 7 | 259.721 | 259.734 | 259.748 | 259.750 | 259.755 | 259.790 | 259.906 | 259.880 | 259.857 | 259.801 | 259.778 | 259.788 | 7 |
| 8 | 259.721 | 259.733 | 259.746 | 259.748 | 259.757 | 259.784 | 259.907 | 259.879 | 259.874 | 259.788 | 259.780 | 259.786 | 8 |
| 9 | 259.720 | 259.737 | 259.744 | 259.748 | 259.758 | 259.788 | 259.920 | 259.877 | 259.881 | 259.802 | 259.781 | 259.787 | 9 |
| 10 | 259.720 | 259.735 | 259.746 | 259.750 | 259.760 | 259.792 | 259.917 | 259.878 | 259.887 | 259.796 | 259.782 | 259.786 | 10 |
| 11 | 259.718 | 259.733 | 259.747 | 259.750 | 259.760 | 259.792 | 259.917 | 259.877 | 259.881 | 259.805 | 259.785 | 259.785 | 11 |
| 12 | 259.716 | 259.734 | 259.747 | 259.750 | 259.760 | 259.794 | 259.922 | 259.880 | 259.889 | 259.805 | 259.781 | 259.788 | 12 |
| 13 | 259.718 | 259.736 | 259.748 | 259.748 | 259.760 | 259.783 | 259.921 | 259.871 | 259.871 | 259.800 | 259.778 | 259.785 | 13 |
| 14 | 259.715 | 259.738 | 259.748 | 259.747 | 259.761 | 259.783 | 259.920 | 259.883 | 259.871 | 259.800 | 259.781 | 259.784 | 14 |
| 15 | 259.716 | 259.738 | 259.747 | 259.748 | 259.761 | 259.781 | 259.920 | 259.881 | 259.873 | 259.795 | 259.778 | 259.783 | 15 |
| 16 | 259.718 | 259.737 | 259.747 | 259.748 | 259.764 | 259.782 | 259.919 | 259.856 | 259.871 | 259.790 | 259.773 | 259.782 | 16 |
| 17 | 259.718 | 259.738 | 259.747 | 259.748 | 259.766 | 259.785 | 259.916 | 259.855 | 259.869 | 259.784 | 259.773 | 259.781 | 17 |
| 18 | 259.718 | 259.736 | 259.749 | 259.747 | 259.772 | 259.798 | 259.921 | 259.856 | 259.870 | 259.774 | 259.772 | 259.784 | 18 |
| 19 | 259.717 | 259.737 | 259.746 | 259.748 | 259.778 | 259.797 | 259.921 | 259.864 | 259.884 | 259.778 | 259.777 | 259.783 | 19 |
| 20 | 259.719 | 259.737 | 259.746 | 259.748 | 259.782 | 259.793 | 259.919 | 259.868 | 259.884 | 259.778 | 259.778 | 259.783 | 20 |
| 21 | 259.717 | 259.738 | 259.747 | 259.748 | 259.784 | 259.785 | 259.913 | 259.841 | 259.859 | 259.778 | 259.777 | 259.782 | 21 |
| 22 | 259.717 | 259.740 | 259.747 | 259.750 | 259.788 | 259.784 | 259.908 | 259.842 | 259.859 | 259.777 | 259.778 | 259.783 | 22 |
| 23 | 259.718 | 259.742 | 259.748 | 259.753 | 259.788 | 259.801 | 259.909 | 259.843 | 259.842 | 259.777 | 259.777 | 259.785 | 23 |
| 24 | 259.718 | 259.744 | 259.745 | 259.755 | 259.788 | 259.822 | 259.903 | 259.844 | 259.849 | 259.778 | 259.785 | 259.786 | 24 |
| 25 | 259.718 | 259.761 | 259.748 | 259.764 | 259.810 | 259.836 | 259.899 | 259.865 | 259.843 | 259.772 | 259.782 | 259.788 | 25 |
| 26 | 259.718 | 259.750 | 259.750 | 259.765 | 259.802 | 259.879 | 259.900 | 259.872 | 259.835 | 259.777 | 259.782 | 259.789 | 26 |
| 27 | 259.718 | 259.749 | 259.749 | 259.765 | 259.798 | 259.883 | 259.888 | 259.866 | 259.835 | 259.789 | 259.781 | 259.780 | 27 |
| 28 | 259.719 | 259.749 | 259.783 | 259.767 | 259.798 | 259.884 | 259.882 | 259.866 | 259.837 | 259.798 | 259.783 | 259.789 | 28 |
| 29 | 259.718 | | 259.782 | 259.768 | 259.787 | 259.887 | 259.885 | 259.867 | 259.831 | 259.798 | 259.789 | 259.788 | 29 |
| 30 | 259.725 | | 259.782 | 259.766 | 259.787 | 259.889 | 259.889 | 259.850 | 259.834 | 259.780 | 259.781 | 259.788 | 30 |
| 31 | 259.725 | | 259.782 | | 259.788 | | 259.887 | 259.859 | | 259.784 | | 259.788 | 31 |
| MEAN | 259.719 | 259.737 | 259.746 | 259.751 | 259.775 | 259.811 | 259.908 | 259.868 | 259.859 | 259.795 | 259.782 | 259.785 | MEAN |
| MAX | 259.725 | 259.751 | 259.763 | 259.757 | 259.810 | 259.889 | 259.922 | 259.892 | 259.891 | 259.837 | 259.783 | 259.790 | MAX |
| MIN | 259.715 | 259.728 | 259.744 | 259.748 | 259.754 | 259.781 | 259.882 | 259.841 | 259.831 | 259.772 | 259.772 | 259.781 | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MEAN, 259.785
MAXIMUM DAILY, 259.922 ON JUL 12
MINIMUM DAILY, 259.715 ON JAN 14
MAXIMUM INSTANTANEOUS,
259.926 AT 21:01 CST ON JUL 9

TYPE OF GAUGE - RECORDING
LOCATION - LAT 53 58 55 N
LONG 101 05 00 W

NATURAL FLOW

DRAINAGE AREA,
573 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1974 ADJ.)

## COCHRANE RIVER NEAR BROCHET - STATION NO. 06DA002

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 134B | 129B | 115 B | 96.5B | 92.5B | 282 | 303 | 324 | 266 | 242 | 2219 | 1638 | 1 |
| 2 | 134B | 129B | 114 B | 96.0B | 92.5B | 283 | 302 | 323 | 265 | 242 | 2198 | 1618 | 2 |
| 3 | 134B | 129B | 114 B | 96.0B | 92.5B | 283 | 303 | 322 | 263 | 242 | 2168 | 1608 | 3 |
| 4 | 134B | 128B | 113 B | 97.5B | 92.5B | 284 | 304 | 321 | 262 | 241 | 2178 | 1588 | 4 |
| 5 | 134B | 126B | 113 B | 97.0B | 93.0B | 284 | 303 | 320 | 260 | 241 | 2168 | 1568 | 5 |
| 6 | 134B | 126B | 112 B | 96.5B | 93.5B | 284 | 303 | 320 | 258 | 240 | 2148 | 1548 | 6 |
| 7 | 134B | 127B | 111 B | 96.0B | 94.0B | 284 | 303 | 318 | 257 | 239 | 2138 | 1538 | 7 |
| 8 | 134B | 127B | 111 B | 95.5B | 95.0B | 285 | 303 | 316 | 255 | 238 | 2118 | 1528 | 8 |
| 9 | 134B | 127B | 110 B | 95.0B | 102 B | 285 | 303 | 317 | 255 | 238 | 2088 | 1518 | 9 |
| 10 | 134B | 126B | 108 B | 95.0B | 126 B | 285 | 302 | 317 | 254 | 238 | 2068 | 1498 | 10 |
| 11 | 134B | 126B | 108 B | 94.5B | 182 B | 286 | 302 | 315 | 252 | 238 | 2048 | 1478 | 11 |
| 12 | 134B | 126B | 108 B | 94.5B | 196 B | 290 | 302 | 313 | 251 | 238 | 2018 | 1468 | 12 |
| 13 | 134B | 126B | 108 B | 94.0B | 234 B | 280 | 301 | 311 | 252 | 236 | 1988 | 1448 | 13 |
| 14 | 134B | 125B | 107 B | 94.5 B | 250 | 281 | 301 | 308 | 250 | 237 | 1968 | 1438 | 14 |
| 15 | 134B | 124B | 106 B | 94.0B | 268 | 281 | 301 | 307 | 250 | 236 | 1958 | 1428 | 15 |
| 16 | 134B | 134B | 106 B | 94.0B | 280 | 281 | 302 | 304 | 248 | 236 | 1938 | 1418 | 16 |
| 17 | 134B | 133B | 105 B | 94.0B | 286 | 282 | 303 | 300 | 248 | 235 | 1908 | 1388 | 17 |
| 18 | 133B | 123B | 105 B | 94.0B | 282 | 284 | 303 | 297 | 248 | 233 | 1888 | 1368 | 18 |
| 19 | 133B | 122B | 104 B | 93.5B | 282 | 285 | 304 | 293 | 248 | 233 | 1868 | 1378 | 19 |
| 20 | 133B | 123B | 104 B | 93.5B | 281 | 286 | 304 | 289 | 248 | 231 | 1848 | 1388 | 20 |
| 21 | 133B | 121B | 103 B | 93.0B | 280 | 286 | 305 | 285 | 247 | 231 | 1828 | 1358 | 21 |
| 22 | 133B | 121B | 103 B | 93.0B | 289 | 286 | 306 | 285 | 247 | 230 | 1808 | 1348 | 22 |
| 23 | 133B | 120B | 103 B | 93.0B | 287 | 301 | 307 | 281 | 246 | 228 | 1788 | 1338 | 23 |
| 24 | 133B | 120B | 102 B | 93.0B | 286 | 303 | 306 | 280 | 246 | 228 | 1768 | 1328 | 24 |
| 25 | 132B | 119B | 102 B | 93.0B | 284 | 304 | 311 | 278 | 245 | 227 | 1748 | 1318 | 25 |
| 26 | 131B | 118B | 101 B | 93.0B | 283 | 304 | 318 | 277 | 245 | 227 | 1728 | 1308 | 26 |
| 27 | 131B | 117B | 101 B | 93.0B | 282 | 304 | 321 | 274 | 245 | 226 | 1708 | 1288 | 27 |
| 28 | 131B | 116B | 100 B | 93.0B | 282 | 303 | 323 | 272 | 245 | 225 | 1688 | 1268 | 28 |
| 29 | 131B | | 100 B | 93.0B | 283 | 304 | 324 | 271 | 244 | 225 | 1678 | 1278 | 29 |
| 30 | 130B | | 99.5B | 92.5B | 282 | 303 | 324 | 269 | 244 | 224 | 1658 | 1268 | 30 |
| 31 | 129B | | 99.0B | | 282 | | 324 | 268 | | 221 | | 1268 | 31 |
| TOTAL | 4 133 | 3 470 | 3 287.5 | 2 838.5 | 8 653.5 | 8 781 | 9 834 | 9 284 | 7 547 | 7 254 | 5 812 | 4 401 | TOTAL |
| MEAN | 133 | 124 | 106 | 94.6 | 279 | 293 | 307 | 299 | 252 | 234 | 194 | 142 | MEAN |
| MAX | 134 | 129 | 115 | 96.5 | 282 | 304 | 324 | 324 | 266 | 242 | 221 | 193 | MAX |
| MIN | 129 | 116 | 99.0 | 92.5 | 92.5 | 282 | 301 | 266 | 244 | 221 | 185 | 126 | MIN |

### SUMMARY FOR THE YEAR 1988

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 200
MAXIMUM DAILY, 324 ON JUL 29
MINIMUM DAILY, 92.5B ON APR 30
MAXIMUM INSTANTANEOUS,
328 AT 13:15 CST ON JUL 30

TYPE OF GAUGE - RECORDING
LOCATION - LAT 58 00 00 N
LONG 101 33 45 W

DRAINAGE AREA, 28 400 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 356 000 | JUL | 823 000 |
| FEB | 300 000 | AUG | 802 000 |
| MAR | 285 000 | SEP | 652 000 |
| APR | 245 000 | OCT | 627 000 |
| MAY | 575 000 | NOV | 502 000 |
| JUN | 759 000 | DEC | 380 000 |

TOTAL DISCHARGE, 5 310 000 dam³

## CONJURING CREEK NEAR RUSSELL - STATION NO. 08MEO05

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1969

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0 | 0 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0 | 0.0038 | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0 | 0.0068 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0 | 0.0238 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0 | 0.0128 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0 | 0.0488 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0 | 0.8458 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0 | 0.470 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0 | 0.338 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0 | 0.288 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0 | 0.183 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0 | 0.142 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0 | 0.105 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0 | 0.080 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0 | 0.068 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0 | 0.051 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0 | 0.033 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0 | 0.027 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0 | 0.026 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0 | 0.028 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0 | 0.022 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0 | 0.018 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0 | 0.018 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0 | 0.010 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0 | 0.008 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0 | 0.008 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0 | 0.005 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0 | 0.004 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0 | | 0 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 2.680 | 0.012 | 0 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.089 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.845 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.011
MAXIMUM DAILY, 0.8458 ON APR 7
MINIMUM DAILY, 0 ON MAR 1
MAXIMUM INSTANTANEOUS,
0.7558 AT 03:02 CST ON APR 7

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 47 30 N
LONG 101 17 55 W
DRAINAGE AREA, 68.1 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 230 | OCT | 0 |
| MAY | 1.04 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, 231 dam³

## COOKS CREEK AT COOKS CREEK - STATION NO. 05OJ005

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1969

| DAY | JAN | FEB | MAR | APR | | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 | B | 0.730 | 0.018 | 0.082 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 | B | 0.480 | 0.013 | 0.085 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 | B | 0.288 | 0.007 | 0.108 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 | B | 0.201 | 0.003 | 0.088 | 0.001 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 | B | 0.101 | 0.006 | 0.094 | 0.002 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0 | B | 0.078 | 0.006 | 0.101 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0 | B | 0.032 | 0.077 | 0.088 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0 | B | 0.038 | 0.122 | 0.080 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0 | B | 0.038 | 0.131 | 0.080 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0 | B | 0.026 | 0.183 | 0.074 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0 | B | 0.011 | 0.170 | 0.078 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0 | B | 0.001 | 0.203 | 0.097 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.0108 | | 0.007 | 0.337 | 0.141 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.1008 | | 0.024 | 0.398 | 0.187 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 1.76 | B | 0.028 | 0.247 | 0.163 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 5.40 | B | 0.028 | 0.177 | 0.141 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 5.80 | B | 0.028 | 0.188 | 0.135 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 8.00 | B | 0.035 | 0.280 | 0.145 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 12.8 | B | 0.037 | 0.203 | 0.125 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 14.5 | B | 0.045 | 0.198 | 0.108 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 12.5 | | 0.040 | 0.238 | 0.090 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 9.80 | | 0.031 | 0.205 | 0.075 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 7.39 | | 0.025 | 0.248 | 0.058 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 5.45 | | 0.024 | 0.285 | 0.044 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 4.12 | | 0.045 | 0.208 | 0.030 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 2.78 | | 0.048 | 0.138 | 0.015 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 1.84 | | 0.040 | 0.111 | 0.002 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 1.41 | | 0.033 | 0.148 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 1.16 | | 0.028 | 0.187 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.942 | | 0.030 | 0.141 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | | 0.024 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 98.492 | | 2.640 | 4.836 | 2.470 | 0.003 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 3.22 | | 0.085 | 0.161 | 0.080 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 14.5 | | 0.730 | 0.398 | 0.187 | 0.002 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | | 0.001 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.434
MAXIMUM DAILY, 14.5B ON APR 20
MINIMUM DAILY, 0B ON MAR 1

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 01 12 N
LONG 96 46 33 W
DRAINAGE AREA, 527 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 213 |
| FEB | --- | AUG | 0.38 |
| MAR | 0 | SEP | 0 |
| APR | 8 240 | OCT | 0 |
| MAY | 238 | NOV | --- |
| JUN | 418 | DEC | --- |

TOTAL DISCHARGE, 8 200 dam³

## COOKS CREEK NEAR EAST SELKIRK - STATION NO. 05OJ002

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.843 | 0 | 0.008 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.818 | 0 | 0.004 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0.382 | 0 | 0.002 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 0.248 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 B | 0.181 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0.0108 | 0.127 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.0108 | 0.109 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.0028 | 0.073 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0 B | 0.027 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0 B | 0.022 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.0528 | 0.009 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.8808 | 0.009 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 1.38 B | 0.007 | 1.02 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 2.48 B | 0.006 | 1.15 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 4.08 B | 0.005 | 0.849 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 7.78 B | 0.003 | 0.389 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 9.03 B | 0.001 | 0.150 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 13.8 B | 0.001 | 0.058 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 18.3 B | 0 | 0.021 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 21.3 B | 0 | 0.029 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 19.1 | 0 | 0.051 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 16.2 | 0 | 0.028 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 12.6 | 0 | 0.013 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 8.83 | 0 | 0.009 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 6.10 | 0 | 0.009 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 4.42 | 0 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 3.02 | 0 | 0.013 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 1.57 | 0 | 0.020 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 1.31 | 0 | 0.018 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.886 | 0 | 0.006 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 181.442 | 2.319 | 3.808 | 0.012 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 5.05 | 0.075 | 0.127 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 21.3 | 0.843 | 1.15 | 0.008 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.843
MAXIMUM DAILY, 21.38 ON APR 20
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
21.78 AT 18:56 CST ON APR 20

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 08 25 N
LONG 96 48 48 W
DRAINAGE AREA, 874 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 1.04 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 13 100 | OCT | 0 |
| MAY | 200 | NOV | --- |
| JUN | 329 | DEC | --- |

TOTAL DISCHARGE, 13 600 dam³

## COOKS CREEK NEAR GLASS - STATION NO. 05OJ007

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.124 | 0.018 | 0.013 | 0 | 0 | 0.007 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.089 | 0.018 | 0.008 | 0 | 0 | 0.006 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0.082 | 0.018 | 0.008 | 0 | 0 | 0.004 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 0.068 | 0.018 | 0.005 | 0 | 0 | 0.002 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 B | 0.053 | 0.018 | 0.007 | 0 | 0 | 0.002 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0 B | 0.052 | 0.020 | 0.008 | 0 | 0 | 0.001 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0 B | 0.045 | 0.041 | 0.008 | 0 | 0 | 0.001 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0 B | 0.044 | 0.035 | 0.007 | 0 | 0 | 0.001 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0 B | 0.043 | 0.038 | 0.091 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0 B | 0.038 | 0.035 | 0.121 | 0 | 0 | 0.001 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0 B | 0.039 | 0.128 | 0.091 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0 B | 0.020 | 0.168 | 0.088 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0 B | 0.015 | 0.161 | 0.051 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.0508 | 0.013 | 0.114 | 0.029 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.5008 | 0.012 | 0.277 | 0.017 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 1.18 B | 0.011 | 0.384 | 0.011 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 1.50 B | 0.010 | 0.288 | 0.007 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 2.00 B | 0.010 | 0.189 | 0.005 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 3.03 B | 0.009 | 0.112 | 0.003 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 3.78 B | 0.010 | 0.084 | 0.003 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 3.31 B | 0.008 | 0.031 | 0.002 | 0.001 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 2.87 B | 0.008 | 0.019 | 0.001 | 0.002 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 1.35 | 0.008 | 0.015 | 0.001 | 0.002 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.989 | 0.005 | 0.015 | 0.001 | 0.001 | 0.084 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.730 | 0.012 | 0.017 | 0 | 0 | 0.089 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.802 | 0.020 | 0.014 | 0 | 0 | 0.081 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.390 | 0.018 | 0.014 | 0 | 0 | 0.030 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.278 | 0.018 | 0.014 | 0 | 0 | 0.013 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.234 | 0.015 | 0.015 | 0 | 0 | 0.007 | 0.0088 | --- | --- | 29 |
| 30 | --- | | 0B | 0.186 | 0.013 | 0.015 | 0 | 0 | 0.006 | 0.0478 | --- | --- | 30 |
| 31 | --- | | 0B | | 0.014 | | 0 | 0 | | 0.0218 | | --- | 31 |
| TOTAL | --- | --- | 0 | 33.748 | 0.919 | 2.318 | 0.581 | 0.008 | 0.300 | 0.089 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.788 | 0.030 | 0.077 | 0.018 | 0 | 0.010 | 0.003 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 3.78 | 0.124 | 0.384 | 0.121 | 0.002 | 0.089 | 0.047 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0.008 | 0.014 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.110
MAXIMUM DAILY, 3.788 ON APR 20
MINIMUM DAILY, 0B ON MAR 1

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 53 10 N
LONG 96 44 26 W
DRAINAGE AREA, 187 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 48.5 |
| FEB | --- | AUG | 0.82 |
| MAR | 0 | SEP | 25.9 |
| APR | 1 970 | OCT | 8.55 |
| MAY | 78.4 | NOV | --- |
| JUN | 200 | DEC | --- |

TOTAL DISCHARGE, 2 330 dam³

## CORMORANT LAKE AT CORMORANT - STATION NO. 05KK002

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 285.852 | 285.819 | --- | 285.828E | 285.822 | 285.838 | 285.888 | 285.886 | 285.843 | 285.817 | 285.855 | 285.886 | 1 |
| 2 | 285.850 | 285.819 | --- | 285.828E | 285.816 | 285.842 | 285.704 | 285.842 | 285.836 | 285.828 | 285.851 | 285.881 | 2 |
| 3 | 285.854 | 285.815 | --- | 285.829E | 285.813 | 285.835 | 285.696 | 285.860 | 285.836 | 285.833 | 285.851 | 285.886 | 3 |
| 4 | 285.848 | 285.818 | --- | 285.830E | 285.814 | 285.835 | 285.898 | 285.853 | 285.848 | 285.829 | 285.858 | 285.891 | 4 |
| 5 | 285.844 | 285.824 | --- | 285.830A | 285.808 | 285.831 | 285.895 | 285.888 | 285.849 | 285.852 | 285.857 | 285.891 | 5 |
| 6 | 285.842 | 285.831 | --- | 285.832 | 285.805 | 285.814 | 285.897 | 285.873 | 285.839 | 285.822 | 285.857 | 285.888 | 6 |
| 7 | 285.840 | 285.831 | --- | 285.824 | 285.811 | 285.815 | 285.896 | 285.870 | 285.885 | 285.818 | 285.870 | 285.885 | 7 |
| 8 | 285.838 | 285.834 | --- | 285.828 | 285.809 | 285.813 | 285.887 | 285.887 | 285.858 | 285.817 | 285.880 | 285.889 | 8 |
| 9 | 285.838 | --- | --- | 285.834 | 285.809 | 285.811 | 285.704 | 285.888 | 285.879 | 285.828 | 285.883 | 285.892 | 9 |
| 10 | 285.831 | --- | --- | 285.838 | 285.807 | 285.898 | 285.897 | 285.898 | 285.885 | 285.821 | --- | 285.881 | 10 |
| 11 | 285.833 | --- | --- | 285.835 | 285.805A | 285.898 | 285.892 | 285.883 | 285.886 | 285.841 | --- | 285.869 | 11 |
| 12 | 285.833 | --- | --- | 285.833 | --- | 285.888 | 285.898 | 285.845 | 285.887 | 285.831 | --- | 285.887 | 12 |
| 13 | 285.834 | --- | --- | 285.835 | --- | 285.896 | 285.702 | 285.835 | 285.868 | 285.818 | --- | 285.892 | 13 |
| 14 | 285.838 | --- | --- | 285.829 | --- | 285.898 | 285.898 | 285.834 | 285.848 | 285.828 | --- | 285.891 | 14 |
| 15 | 285.828 | --- | --- | 285.832 | --- | 285.892 | 285.890 | 285.832 | 285.885 | 285.830 | --- | 285.898 | 15 |
| 16 | 285.832 | --- | --- | 285.826 | --- | 285.892 | 285.891 | 285.835 | 285.838 | 285.828 | --- | 285.703 | 16 |
| 17 | 285.829 | --- | --- | 285.824 | --- | 285.801 | 285.895 | 285.819 | 285.850 | 285.833 | --- | 285.702 | 17 |
| 18 | 285.834 | --- | --- | 285.823 | --- | 285.802 | 285.894 | 285.821 | 285.848 | 285.830 | --- | 285.701 | 18 |
| 19 | 285.832 | --- | --- | 285.822 | --- | 285.896 | 285.700 | 285.811 | 285.848 | 285.832 | --- | 285.701 | 19 |
| 20 | 285.831 | --- | --- | 285.821 | --- | 285.802 | 285.701 | 285.808 | 285.885 | 285.826 | --- | 285.704 | 20 |
| 21 | 285.834 | --- | 285.828A | 285.821 | --- | 285.898 | 285.894 | 285.887 | 285.882 | 285.830 | --- | 285.702 | 21 |
| 22 | 285.831 | 285.841A | --- | 285.820 | --- | 285.886 | 285.894 | 285.878 | 285.848 | 285.833 | --- | 285.700 | 22 |
| 23 | 285.826 | --- | --- | 285.838 | --- | 285.883 | 285.888 | 285.884 | 285.838 | 285.837 | --- | 285.711 | 23 |
| 24 | 285.824 | --- | --- | 285.839 | --- | 285.891 | 285.881 | 285.808 | 285.880 | 285.838 | 285.872A | 285.718 | 24 |
| 25 | 285.827 | --- | --- | 285.835 | --- | 285.804 | 285.898 | 285.848 | 285.837 | 285.880 | 285.878 | 285.719 | 25 |
| 26 | 285.829 | --- | --- | 285.830 | --- | 285.843 | 285.872 | 285.849 | 285.830 | 285.848 | 285.878 | 285.720 | 26 |
| 27 | 285.828 | --- | --- | 285.827 | --- | 285.872 | 285.881 | 285.854 | 285.841 | 285.854 | 285.878 | 285.721 | 27 |
| 28 | 285.827 | --- | --- | 285.826 | --- | 285.884 | 285.852 | 285.830 | 285.850 | 285.892 | 285.878 | 285.720 | 28 |
| 29 | 285.827 | | --- | 285.820 | --- | 285.887 | 285.854 | 285.846 | 285.831 | 285.877 | 285.885 | 285.718 | 29 |
| 30 | 285.824 | | --- | 285.821 | 285.848A | 285.888 | 285.858 | 285.851 | 285.808 | 285.885 | 285.882 | 285.726 | 30 |
| 31 | 285.820 | | --- | | 285.845 | | 285.855 | 285.844 | | 285.869 | | 285.723 | 31 |
| MEAN | 285.834 | --- | --- | 285.829 | --- | 285.817 | 285.889 | 285.836 | 285.849 | 285.837 | --- | 285.701 | MEAN |
| MAX | 285.854 | --- | --- | 285.838 | --- | 285.888 | 285.704 | 285.873 | 285.887 | 285.892 | --- | 285.728 | MAX |
| MIN | 285.820 | --- | --- | 285.820 | --- | 285.883 | 285.852 | 285.878 | 285.808 | 285.817 | --- | 285.881 | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MAXIMUM DAILY, 285.728 ON DEC 30
MINIMUM DAILY, 285.678 ON AUG 22
MAXIMUM INSTANTANEOUS,
285.730 AT 01:53 CST ON DEC 30

TYPE OF GAUGE - RECORDING
LOCATION - LAT 54 13 00 N
LONG 100 38 00 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED

DRAINAGE AREA,
2 740 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1929 ADJ.)

## CROSS LAKE AT CROSS LAKE - STATION NO. 05UD001

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 208.683 | 208.441 | 208.320 | 208.138 | 208.887 | 208.818 | 208.844 | --- | --- | 207.084 | 207.027 | 207.280 | 1 |
| 2 | 208.683 | 208.437 | 208.332 | 208.131 | 208.883 | 208.833 | 208.839 | --- | --- | 208.992 | 208.988 | 207.278 | 2 |
| 3 | 208.700 | 208.432 | 208.331 | 208.118 | 208.881 | 208.819 | 208.855 | --- | --- | 208.851 | 208.889 | 207.288 | 3 |
| 4 | 208.704 | 208.433 | 208.328 | 208.088 | 208.878 | 208.813 | 208.898 | --- | --- | 208.880 | 208.894 | 207.308 | 4 |
| 5 | 208.701 | 208.431 | 208.328 | 208.083 | 208.884 | 208.481 | 208.700 | --- | 208.673A | 208.870 | 208.898 | 207.308 | 5 |
| 6 | 208.888 | 208.428 | 208.331 | 208.073 | 208.038 | 208.804 | 208.718 | --- | 208.812 | 208.882 | 208.884 | 207.317 | 6 |
| 7 | 208.877 | 208.412 | 208.337 | 208.084 | 208.998 | 208.822 | 208.701 | --- | 208.883 | 208.887 | 208.889 | 207.320 | 7 |
| 8 | 208.872 | 208.408 | 208.337 | 208.088 | 208.884 | 208.811 | 208.882 | --- | 208.858 | 208.888 | 208.882 | 207.348 | 8 |
| 9 | 208.884 | 208.388 | 208.333 | 208.048 | 208.822 | 208.487 | 208.713 | --- | 208.883 | 208.888 | 208.878 | 207.357 | 9 |
| 10 | 208.859 | 208.380 | 208.330 | 208.029 | 208.827 | 208.800 | 208.730 | 208.278A | 208.888 | 207.818 | 208.878 | 207.388 | 10 |
| 11 | 208.888 | 208.383 | 208.328 | 208.888 | 208.810 | 208.826 | 208.734 | --- | 208.882 | 207.819 | 208.881 | 207.378 | 11 |
| 12 | 208.883 | 208.378 | 208.328 | 208.878 | 208.884 | 208.843 | 208.723 | --- | 208.878 | 207.814 | 208.888 | 207.385 | 12 |
| 13 | 208.848 | 208.372 | 208.318 | 208.882 | 208.888 | 208.831 | 208.738 | --- | 208.888 | 207.838 | 208.848 | 207.381 | 13 |
| 14 | 208.834 | 208.385 | 208.317 | 208.884 | 208.804 | 208.478 | 208.781 | --- | 208.718 | 207.848 | 208.848 | 207.388 | 14 |
| 15 | 208.820 | 208.380 | 208.317 | 208.885 | 208.885 | 208.448 | 208.788 | --- | 208.731 | 207.844 | 208.858 | 207.404 | 15 |
| 16 | 208.813 | 208.384 | 208.317 | 208.880 | 208.837 | 208.488 | 208.778 | --- | 208.741 | 207.841 | 208.872 | 207.418 | 16 |
| 17 | 208.801 | 208.384 | 208.318 | 208.844 | 208.842 | 208.472 | 208.780A | --- | 208.788 | 207.838 | 208.863 | 207.428 | 17 |
| 18 | 208.888 | 208.384 | 208.318 | 208.835 | 208.787 | 208.828 | --- | --- | 208.744 | 207.827 | 207.887 | 207.433 | 18 |
| 19 | 208.887 | 208.381 | 208.314 | 208.828 | 208.788 | 208.883 | --- | --- | 208.777 | 207.818 | 207.828 | 207.438 | 19 |
| 20 | 208.877 | 208.380 | 208.308 | 208.828 | 208.838 | 208.874 | --- | --- | 208.788 | 207.884 | 207.824 | 207.444 | 20 |
| 21 | 208.873 | 208.348 | 208.288 | 208.823 | 208.787 | 208.878 | --- | --- | 208.882 | 207.108 | 207.828 | 207.448 | 21 |
| 22 | 208.870 | 208.344 | 208.277 | 208.828 | 208.731 | 208.888 | --- | --- | 208.833 | 207.108 | 207.837 | 207.481 | 22 |
| 23 | 208.881 | 208.342 | 208.288 | 208.828 | 208.718 | 208.818 | --- | --- | 208.841 | 207.108 | 207.852 | 207.473 | 23 |
| 24 | 208.881 | 208.340 | 208.280 | 208.830 | 208.711 | 208.820 | --- | --- | 208.818 | 207.098 | 207.877 | 207.477 | 24 |
| 25 | 208.842 | 208.338 | 208.240 | 208.827 | 208.888 | 208.831 | --- | --- | 208.880 | 207.088 | 207.101 | 207.478 | 25 |
| 26 | 208.833 | 208.331 | 208.232 | 208.814 | 208.880 | 208.837 | --- | --- | 208.884 | 207.084 | 207.122 | 207.480 | 26 |
| 27 | 208.820 | 208.330 | 208.218 | 208.804 | 208.830 | 208.880 | --- | --- | 208.887 | 207.138 | 207.147 | 207.488 | 27 |
| 28 | 208.488 | 208.328 | 208.182 | 208.882 | 208.808 | 208.838 | --- | --- | 208.818 | 207.108 | 207.183 | 207.442 | 28 |
| 29 | 208.488 | | 208.174 | 208.883 | 208.888 | 208.818 | --- | 208.483A | 208.882 | 207.028 | 207.214 | 207.430 | 29 |
| 30 | 208.488 | | 208.158 | 208.873 | 208.832 | 208.823 | --- | --- | 208.888 | 207.037 | 207.238 | 207.428 | 30 |
| 31 | 208.447 | | 208.147 | | 208.882 | | --- | --- | | 207.048 | | 207.418 | 31 |
| MEAN | 208.808 | 208.378 | 208.288 | 208.882 | 208.810 | 208.847 | --- | --- | --- | 207.038 | 207.032 | 207.388 | MEAN |
| MAX | 208.704 | 208.441 | 208.337 | 208.138 | 208.038 | 208.880 | --- | --- | --- | 207.138 | 207.238 | 207.480 | MAX |
| MIN | 208.447 | 208.328 | 208.147 | 208.873 | 208.832 | 208.448 | --- | --- | --- | 208.851 | 208.848 | 207.280 | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MAXIMUM DAILY, 207.480 ON DEC 26
MINIMUM DAILY, 208.448 ON JUN 18
MAXIMUM INSTANTANEOUS,
207.488 AT 11:20 CST ON DEC 26

TYPE OF GAUGE - RECORDING
LOCATION - LAT 54 37 25 N
LONG 97 47 07 W

A - MANUAL GAUGE

REGULATED

DRAINAGE AREA,
887 000 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1988 ADJ.)

## CRYSTAL CITY RESERVOIR AT CRYSTAL CITY - STATION NO. 05OB001

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 451.881 | 451.387E | 451.310E | 450.807E | 450.832 | 450.807E | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 451.870E | 451.387 | 451.308E | 450.782 | 450.885E | 450.807 | --- | --- | 2 |
| 3 | --- | --- | --- | --- | 451.858 | 451.382E | 451.307 | 450.770E | 450.879E | 450.808E | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 451.843E | 451.377E | 451.305E | 450.757 | 450.702 | 450.802 | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 451.827 | 451.372 | 451.302 | 450.749E | 450.897E | 450.802E | --- | --- | 5 |
| 6 | --- | --- | --- | --- | 451.813E | 451.375E | 451.287E | 450.740E | 450.883 | 450.803 | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 451.887E | 451.377 | 451.282 | 450.732 | 450.885E | 450.888E | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 451.862 | 451.378E | 451.288E | 450.717E | 450.887 | 450.883E | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 451.882E | 451.372 | 451.288E | 450.702 | 450.887E | 450.888E | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 451.882 | 451.370E | 451.282 | 450.892E | 450.897E | 450.884E | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 451.861E | 451.389E | 451.277E | 450.882 | 450.887 | 450.880E | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 451.878 | 451.387 | 451.272 | 450.882E | 450.702E | 450.878E | --- | --- | 12 |
| 13 | --- | --- | --- | 451.882 | 451.870E | 451.370E | 451.318E | 450.882E | 450.707 | 450.871E | --- | --- | 13 |
| 14 | --- | --- | --- | 451.927E | 451.861E | 451.372 | 451.187 | 450.882 | 450.712E | 450.888E | --- | --- | 14 |
| 15 | --- | --- | --- | 451.882 | 451.862 | 451.374E | 451.132E | 450.887E | 450.717 | 450.882E | --- | --- | 15 |
| 16 | --- | --- | --- | 451.931 | 451.840E | 451.375 | 451.107E | 450.832 | 450.708E | 450.887 | --- | --- | 16 |
| 17 | --- | --- | --- | 451.887E | 451.927 | 451.371E | 451.082 | 450.805E | 450.884E | 450.882E | --- | --- | 17 |
| 18 | --- | --- | --- | 451.782 | 451.808E | 451.368E | 451.080E | 450.677 | 450.882 | 450.847 | --- | --- | 18 |
| 19 | --- | --- | --- | 451.770E | 451.488 | 451.362 | 451.077 | 450.675E | 450.870E | 450.840E | --- | --- | 19 |
| 20 | --- | --- | --- | 451.767 | 451.488E | 451.367E | 451.058E | 450.674E | 450.857 | 450.832 | --- | --- | 20 |
| 21 | --- | --- | --- | 451.788E | 451.451E | 451.332 | 451.032 | 450.872 | 450.848E | 450.832E | --- | --- | 21 |
| 22 | --- | --- | --- | 451.782 | 451.432 | 451.332E | 451.028E | 450.868E | 450.832 | 450.832E | --- | --- | 22 |
| 23 | --- | --- | --- | 451.742E | 451.432E | 451.332 | 451.028E | 450.857 | 450.832E | 450.832 | --- | --- | 23 |
| 24 | --- | 450.273 | --- | 451.732 | 451.432 | 451.330E | 451.023 | 450.840E | 450.832E | 450.827E | --- | --- | 24 |
| 25 | --- | --- | --- | 451.732E | 451.432E | 451.328E | 451.018E | 450.822 | 450.832 | 450.822 | --- | --- | 25 |
| 26 | --- | --- | --- | 451.731 | 451.432 | 451.327 | 451.007 | 450.825E | 450.825E | 450.817E | --- | --- | 26 |
| 27 | --- | --- | --- | 451.707 | 451.430E | 451.328E | 450.998E | 450.828E | 450.817 | 450.812 | --- | --- | 27 |
| 28 | --- | --- | --- | 451.720 | 451.428E | 451.331 | 450.982 | 450.832 | 450.812E | 450.810E | --- | --- | 28 |
| 29 | --- | | --- | 451.707E | 451.427 | 451.322E | 450.832E | 450.822E | 450.807 | 450.807E | --- | --- | 29 |
| 30 | --- | | --- | 451.885E | 451.417E | 451.312 | 450.882E | 450.712 | 450.807E | 450.808E | --- | --- | 30 |
| 31 | --- | | --- | | 451.407 | | 450.832 | 450.872E | | 450.803 | | | 31 |
| MEAN | --- | --- | --- | --- | 451.827 | 451.388 | 451.138 | 450.850 | 450.888 | 450.887 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 451.881 | 451.387 | 451.310 | 450.807 | 450.717 | 450.807 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 451.407 | 451.312 | 450.832 | 450.832 | 450.807 | 450.803 | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 06 38 N
LONG 98 57 20 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1982

DRAINAGE AREA, 158 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

REMARKS - PRIOR TO 1988 PUBLISHED AS "CRYSTAL CREEK ABOVE CRYSTAL CITY DAM"

## CRYSTAL CREEK NEAR CRYSTAL CITY - STATION NO. 05OB005

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.004 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 B | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0 B | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0 B | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0 B | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.0038 | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.0319 | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.1388 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.8598 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 3.54 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 3.52 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 3.33 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 1.93 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.578 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.377 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.238 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.098 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.050 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.031 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.017 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.014 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.012 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.011 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.008 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.005 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.004 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.004 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 13.883 | 0.037 | 0 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.459 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 3.52 | 0.004 | 0 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.088
MAXIMUM DAILY, 3.52 ON APR 14
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
5.38 AT 20:32 CST ON APR 14

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 07 38 N
LONG 98 58 38 W
DRAINAGE AREA, 135 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 1 180 | OCT | 0 |
| MAY | 2.33 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, 1 180 dam³

## CYPRESS CREEK NEAR CLEARWATER - STATION NO. 05DB010

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.044 | 0 | 0.002 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.038 | 0 | 0.001 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0.031 | 0 | 0.001 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 0.024 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0.005B | 0.018 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 4.37 B | 0.011 | 0.003E | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 7.18 B | 0.012 | 0.003E | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 8.41 B | 0.010 | 0.002E | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 8.41 B | 0.006A | 0.001E | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 3.48 B | 0.005E | 0.001E | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 1.83 | 0.004E | 0.005E | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 2.41 | 0.004E | 0.008E | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 5.06 | 0.003E | 0.008A | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 5.81 | 0.004E | 0.006 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 4.83 | 0.003E | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 3.28 | 0.003E | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 1.83 | 0.002E | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 1.14 | 0.002E | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.783 | 0.003E | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.525 | 0.003E | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.440 | 0.001E | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.450 | 0.001E | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.408 | 0.003E | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.287 | 0.003E | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.224 | 0.002E | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.178 | 0.002E | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.129 | 0.002E | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.093 | 0.003E | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.074 | 0.002E | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.057 | 0.001E | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0.001E | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 57.545 | 0.247 | 0.056 | 0.004 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 1.82 | 0.008 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 7.18 | 0.044 | 0.008 | 0.002 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.236
MAXIMUM DAILY, 7.180 ON APR 7
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
10.30 AT 09:31 CST ON APR 9

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 05 21 N
LONG 98 56 54 W
DRAINAGE AREA, 388 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0.38 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 4 970 | OCT | 0 |
| MAY | 31.3 | NOV | --- |
| JUN | 4.84 | DEC | --- |

TOTAL DISCHARGE, 5 000 dam³

## CYPRESS CREEK NEAR SARLES - STATION NO. 05DB031

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | 0.007 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2 | 0 | 0 | 0 | 0 | 0.006 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 3 | 0 | 0 | 0 | 0 | 0.005 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 4 | 0 | 0 | 0 | 0 | 0.004 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 5 | 0 | 0 | 0 | 0.0288 | 0.002 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 6 | 0 | 0 | 0 | 0.4258 | 0.002 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 7 | 0 | 0 | 0 | 1.13 B | 0.001 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 8 | 0 | 0 | 0 | 2.27 B | 0.001 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 9 | 0 | 0 | 0 | 1.27 | 0.001 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 10 | 0 | 0 | 0 | 0.934 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 11 | 0 | 0 | 0 | 0.851 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 12 | 0 | 0 | 0 | 0.821 | 0 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 13 | 0 | 0 | 0 | 1.30 | 0 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 14 | 0 | 0 | 0 | 1.84 | 0 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 15 | 0 | 0 | 0 | 1.10 | 0 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| 16 | 0 | 0 | 0 | 0.649 | 0 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 17 | 0 | 0 | 0 | 0.453 | 0.001 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 18 | 0 | 0 | 0 | 0.278 | 0.001 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 19 | 0 | 0 | 0 | 0.232 | 0 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 20 | 0 | 0 | 0 | 0.170 | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| 21 | 0 | 0 | 0 | 0.187 | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| 22 | 0 | 0 | 0 | 0.110 | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| 23 | 0 | 0 | 0 | 0.078 | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| 24 | 0 | 0 | 0 | 0.068 | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 25 | 0 | 0 | 0 | 0.054 | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 25 |
| 26 | 0 | 0 | 0 | 0.040 | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| 27 | 0 | 0 | 0 | 0.024 | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 27 |
| 28 | 0 | 0 | 0 | 0.018 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| 29 | 0 | | 0 | 0.011 | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| 30 | 0 | | 0 | 0.008 | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 30 |
| 31 | 0 | | 0 | | 0.001 | | 0 | 0 | | 0 | | 0 | 31 |
| TOTAL | 0 | 0 | 0 | 14.140 | 0.034 | 0.049 | 0.001 | 0 | 0 | 0 | 0 | 0 | TOTAL |
| MEAN | 0 | 0 | 0 | 0.471 | 0.001 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | MEAN |
| MAX | 0 | 0 | 0 | 2.27 | 0.007 | 0.003 | 0.001 | 0 | 0 | 0 | 0 | 0 | MAX |
| MIN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.038
MAXIMUM DAILY, 2.270 ON APR 8
MINIMUM DAILY, 0 ON JAN 1

SUMMARY FOR THE YEAR 1988

INTERNATIONAL GAUGING STATION
TYPE OF GAUGE - RECORDING
LOCATION - LAT 48 56 35 N
LONG 98 57 05 W
DRAINAGE AREA, 148 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 0 | JUL | 0.09 |
| FEB | 0 | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 1 220 | OCT | 0 |
| MAY | 3.84 | NOV | 0 |
| JUN | 3.07 | DEC | 0 |

TOTAL DISCHARGE, 1 230 dam³

## CYPRESS RIVER NEAR BRUXELLES - STATION NO. 05MH005

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.304 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.330 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0.0188 | 0.170 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0.2898 | 0.184 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0.3188 | 0.122 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0.3788 | 0.1118 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.4888 | 0.098E | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.4818 | 0.088E | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.4188 | 0.078A | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.3788 | 0.068 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.3408 | 0.042 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.4708 | 0.028 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 1.03 B | 0.021 | 0.015 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 1.27 B | 0.018 | 0.012 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 3.38 B | 0.016 | 0.007 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 4.29 | 0.013 | 0.007 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 4.31 | 0.017 | 0.006 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 4.32 | 0.021 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 3.42 | 0.018 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 3.02 | 0.014 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 3.11 | 0.011 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 2.91 | 0.008 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 2.48 | 0.007 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 1.87 | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 1.48 | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 1.21 | 0.007 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.819 | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.859 | 0.005 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.508 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.405 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0.002 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 44.087 | 1.884 | 0.073 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 1.47 | 0.054 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 4.31 | 0.304 | 0.015 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.187
MAXIMUM DAILY, 4.31 ON APR 17
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
8.42 AT 11:04 CST ON APR 17

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 28 48 N
LONG 98 54 28 W
DRAINAGE AREA, 277 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 3 810 | OCT | 0 |
| MAY | 148 | NOV | --- |
| JUN | 8.31 | DEC | --- |

TOTAL DISCHARGE, 3 960 dam³

## CYPRESS RIVER NEAR CYPRESS RIVER - STATION NO. 05MH004

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0.0508 | 0.802 | 0.016 | 0.048 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0.5008 | 0.498 | 0.013 | 0.013 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 1.62 B | 0.411 | 0.007 | 0.001 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 4.15 B | 0.328 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 4.03 B | 0.277 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 2.32 B | 0.237 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 1.72 B | 0.207 | 0.017 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 1.51 B | 0.195 | 0.038 | 0.006 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 1.28 B | 0.172 | 0.023 | 0.027 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 1.02 B | 0.152 | 0.014 | 0.018 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.8838 | 0.385 | 0.053 | 0.003 | 0 | 0.008 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 1.00 B | 0.208 | 1.17 | 0 | 0 | 0.007 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 1.37 B | 0.148 | 1.55 | 0 | 0 | 0.001 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 2.11 B | 0.127 | 0.981 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 2.79 | 0.112 | 0.432 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 4.70 | 0.099 | 0.205 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 4.82 | 0.095 | 0.110 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 5.06 | 0.103 | 0.077 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 4.80 | 0.081 | 0.055 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 3.83 | 0.078 | 0.048 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 3.36 | 0.084 | 0.048 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 3.34 | 0.068 | 0.023 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 3.02 | 0.051 | 0.021 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 2.56 | 0.054 | 0.018 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 2.03 | 0.063 | 0.018 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 1.54 | 0.053 | 0.018 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 1.37 | 0.048 | 0.020 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 1.11 | 0.038 | 0.013 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.888 | 0.030 | 0.018 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.721 | 0.023 | 0.044 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0.020 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 70.022 | 5.025 | 5.045 | 0.118 | 0 | 0.016 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 2.33 | 0.162 | 0.168 | 0.004 | 0 | 0.001 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 5.06 | 0.802 | 1.55 | 0.048 | 0 | 0.008 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.050 | 0.020 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.327
MAXIMUM DAILY, 5.06 ON APR 18
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
7.26 AT 07:46 CST ON APR 18

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 35 31 N
LONG 99 03 00 W
DRAINAGE AREA, 824 km²
B - ICE CONDITIONS
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 10.0 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 1.38 |
| APR | 6 050 | OCT | 0 |
| MAY | 434 | NOV | --- |
| JUN | 435 | DEC | --- |

TOTAL DISCHARGE, 6 930 dam³

## DAUPHIN LAKE AT OCHRE BEACH - STATION NO. 05LJ010

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 280.284 | 280.378E | 280.284E | 280.217 | 280.187 | 280.178E | 280.135 | --- | 1 |
| 2 | --- | --- | --- | --- | 280.283 | 280.375 | 280.283 | 280.212 | 280.186 | 280.210 | 280.130E | --- | 2 |
| 3 | --- | --- | --- | --- | 280.285 | 280.368E | 280.273 | 280.187E | 280.187E | 280.070 | 280.138E | --- | 3 |
| 4 | --- | --- | --- | --- | 280.283 | 280.340 | 280.323 | 280.182 | 280.135 | 280.120 | 280.140 | --- | 4 |
| 5 | --- | --- | --- | --- | 280.283E | 280.277 | 280.313 | 280.182E | 280.178 | 280.120 | 280.128E | --- | 5 |
| 6 | --- | --- | --- | --- | 280.283 | 280.225 | 280.288 | 280.201 | 280.150 | 280.240 | 280.130 | --- | 6 |
| 7 | --- | --- | --- | --- | 280.284E | 280.305 | 280.383 | 280.191 | 280.185E | --- | 280.137E | --- | 7 |
| 8 | --- | --- | --- | --- | 280.285 | 280.275 | 280.380E | 280.191 | 280.180 | --- | 280.143E | --- | 8 |
| 9 | --- | 280.247 | --- | --- | 280.285 | 280.285 | 280.336E | 280.189 | 280.280 | --- | 280.150 | --- | 9 |
| 10 | --- | --- | --- | --- | 280.290E | 280.285 | 280.323 | 280.206 | 280.285E | --- | 280.150E | --- | 10 |
| 11 | --- | --- | --- | --- | 280.305 | 280.370E | 280.278 | 280.188 | 280.220 | --- | 280.180 | --- | 11 |
| 12 | --- | --- | --- | --- | 280.348 | 280.475 | 280.313 | 280.188 | 280.188 | --- | 280.150E | --- | 12 |
| 13 | --- | --- | --- | --- | 280.350E | 280.385 | 280.278 | 280.188E | 280.140 | --- | 280.149 | --- | 13 |
| 14 | --- | --- | --- | --- | 280.373E | 280.353 | 280.383 | 280.206 | 280.180 | --- | 280.181E | --- | 14 |
| 15 | --- | --- | --- | --- | 280.367E | 280.334 | 280.388E | 280.204 | 280.185 | --- | 280.182 | --- | 15 |
| 16 | --- | --- | --- | 280.344 | 280.301E | 280.284 | 280.282E | 280.200 | 280.187E | 280.082 | 280.181E | --- | 16 |
| 17 | --- | --- | --- | 280.345E | 280.315 | 280.314 | 280.277E | 280.210 | 280.208E | 280.081E | 280.150 | --- | 17 |
| 18 | --- | --- | --- | 280.346 | 280.375 | 280.327E | 280.271 | 280.248 | 280.230 | 280.100 | 280.150E | --- | 18 |
| 19 | --- | --- | --- | 280.358E | 280.355 | 280.338 | 280.282 | 280.209E | 280.180 | 280.110E | 280.149 | --- | 19 |
| 20 | --- | --- | --- | 280.365E | 280.345 | 280.334 | 280.284 | 280.188E | 280.145 | 280.120 | 280.151E | --- | 20 |
| 21 | --- | --- | --- | 280.374 | 280.177E | 280.304 | 280.272 | 280.130 | 280.150 | 280.112E | 280.152 | --- | 21 |
| 22 | --- | --- | --- | 280.376E | 280.210 | 280.314 | 280.322 | 280.144 | 280.280 | 280.103E | --- | --- | 22 |
| 23 | --- | --- | --- | 280.378 | 280.253 | 280.317E | 280.247E | 280.180 | 280.229E | 280.095 | --- | --- | 23 |
| 24 | --- | --- | --- | 280.381E | 280.283 | 280.321E | 280.273 | 280.184E | 280.178E | 280.108E | --- | --- | 24 |
| 25 | --- | --- | --- | 280.383 | 280.340 | 280.324 | 280.222 | 280.178 | 280.128 | 280.120 | --- | --- | 25 |
| 26 | --- | --- | --- | 280.385E | 280.283 | 280.354 | 280.182 | 280.187E | 280.180 | 280.178E | --- | --- | 26 |
| 27 | --- | --- | --- | 280.387 | 280.200 | 280.314 | 280.242 | 280.158E | 280.125 | 280.230 | --- | --- | 27 |
| 28 | --- | --- | --- | 280.387E | 280.218E | 280.324 | 280.202 | 280.145 | 280.148 | 280.175E | --- | --- | 28 |
| 29 | --- | | --- | 280.386E | 280.330 | 280.304 | 280.182E | 280.280 | 280.145 | 280.120 | --- | --- | 29 |
| 30 | --- | | --- | 280.388 | 280.347 | 280.284 | 280.182E | 280.185 | 280.145 | 280.120E | --- | --- | 30 |
| 31 | --- | | --- | | 280.275 | | 280.172 | 280.188E | | 280.140 | | --- | 31 |
| MEAN | --- | --- | --- | --- | 280.284 | 280.308 | 280.270 | 280.168 | 280.180 | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 280.340 | 280.475 | 280.383 | 280.280 | 280.280 | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 280.145 | 280.234 | 280.172 | 280.130 | 280.125 | --- | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MAXIMUM DAILY, 280.475 ON JUN 13

TYPE OF GAUGE - MANUAL
LOCATION - LAT 51 06 45 N
LONG 98 44 20 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1931

DRAINAGE AREA,
8 890 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1929 ADJ.)

## DAUPHIN LAKE AT OUTLET - STATION NO. 05LJ005

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 280.204 | 280.224 | 280.222 | 280.233 | 280.281 | 280.316 | 280.343 | 280.188 | 280.175 | 258.850 | 280.001 | 280.137 | 1 |
| 2 | 280.202 | 280.221 | 280.221 | 280.230 | 280.238 | 280.313 | 280.276A | 280.222 | 280.201 | 258.885 | 280.131 | 280.139 | 2 |
| 3 | 280.210 | 280.224 | 280.224 | 280.227 | 280.268 | 280.184 | 280.267 | 280.213 | 280.228 | 280.088 | 280.168 | 280.140 | 3 |
| 4 | 280.207 | 280.224 | 280.221 | 280.233 | 280.118 | 280.245 | 280.288 | 280.084 | 280.184 | 280.114 | 280.081 | 280.138 | 4 |
| 5 | 280.208 | 280.221 | 280.219 | 280.231 | 280.144 | 280.339 | 280.248 | 280.081 | 280.185 | 258.885 | 280.088 | 280.133 | 5 |
| 6 | 280.207 | 280.228 | 280.218 | 280.238 | 280.300 | 280.231 | 280.275 | 280.187 | 280.178 | 258.863 | 280.113 | 280.136 | 6 |
| 7 | 280.208 | 280.221 | 280.217 | 280.238 | 280.243 | 280.303 | 280.268A | 280.175 | 280.130 | 280.117 | 280.085 | 280.137 | 7 |
| 8 | 280.208 | 280.228 | 280.217 | 280.241 | 280.280 | 280.243 | 280.284A | 280.183 | 280.120 | 280.128 | 280.082 | 280.132 | 8 |
| 9 | 280.210 | 280.224 | 280.221 | 280.244 | 280.278 | 280.280 | 280.264 | 280.183 | 280.010 | 280.084 | 280.121 | 280.136 | 9 |
| 10 | 280.208 | 280.224 | 280.223 | 280.248 | 280.321 | 280.285 | 280.267 | 280.178 | 280.180 | 280.125 | 280.113 | 280.143 | 10 |
| 11 | 280.207 | 280.228 | 280.224 | 280.247 | 280.288 | 280.232 | 280.278 | 280.183 | 280.087 | 280.007 | 280.081 | 280.141 | 11 |
| 12 | 280.213 | 280.228 | 280.228 | 280.252 | 280.321 | 258.862 | 280.280 | 280.188 | 280.185 | 280.080 | 280.118 | 280.142 | 12 |
| 13 | 280.218 | 280.222 | 280.230 | 280.260 | 280.287 | 280.212 | 280.288 | 280.147 | 280.188 | 280.112 | 280.128 | 280.143 | 13 |
| 14 | 280.210 | 280.214 | 280.229 | 280.260 | 280.276 | 280.284 | 280.288 | 280.184 | 280.183 | 280.083 | 280.123 | 280.143 | 14 |
| 15 | 280.215 | 280.215 | 280.231 | 280.262 | 280.288 | 280.318 | 280.277 | 280.182 | 280.133 | 280.009 | 280.128 | 280.145 | 15 |
| 16 | 280.213 | 280.217 | 280.230 | 280.261 | 280.300 | 280.286 | 280.282 | 280.205 | 280.183 | 280.088 | 280.138 | 280.143 | 16 |
| 17 | 280.218 | 280.219 | 280.228 | 280.258 | 280.288 | 280.313 | 280.270 | 280.230 | 280.131 | 280.084 | 280.128 | 280.144 | 17 |
| 18 | 280.221 | 280.220 | 280.228 | 280.262 | 280.281 | 280.312 | 280.248 | 280.193 | 280.021 | 280.148 | 280.133 | 280.144 | 18 |
| 19 | 280.220 | 280.216 | 280.224 | 280.253 | 280.328 | 280.348 | 280.281A | 280.023 | 280.150 | 280.128 | 280.136 | 280.139 | 19 |
| 20 | 280.223 | 280.218 | 280.224 | 280.262 | 280.287 | 280.302 | 280.282 | 280.177 | 280.130 | 280.110 | 280.131 | 280.138 | 20 |
| 21 | 280.220 | 280.215 | 280.227 | 280.265 | 280.238 | 280.307 | 280.282 | 280.218 | 280.047 | 280.130 | 280.131 | 280.140 | 21 |
| 22 | 280.218 | 280.221 | 280.223 | 280.260 | 280.213 | 280.298 | 280.301 | 280.184 | 258.883 | 280.098 | 280.134 | 280.142 | 22 |
| 23 | 280.230 | 280.219 | 280.228 | 280.268 | 280.242 | 280.310 | 280.308 | 280.211 | 280.150 | 280.105 | 280.134 | 280.138 | 23 |
| 24 | 280.231 | 280.220 | 280.228 | 280.267 | 280.241 | 280.304 | 280.248 | 280.251 | 280.085 | 280.137 | 280.128 | 280.143 | 24 |
| 25 | 280.221 | 280.218 | 280.227 | 280.270 | 280.048 | 280.328 | 280.222 | 280.210 | 280.087 | 280.103 | 280.132 | 280.137 | 25 |
| 26 | 280.222 | 280.219 | 280.223 | 280.268 | 280.287 | 280.277 | 280.143 | 280.140 | 280.183 | 280.084 | 280.132 | 280.148 | 26 |
| 27 | 280.223 | 280.221 | 280.222 | 280.268 | 280.248 | 280.282 | 280.202 | 280.171 | 280.134 | 258.840 | 280.135 | 280.148 | 27 |
| 28 | 280.222 | 280.220 | 280.225 | 280.262 | 280.228 | 280.412 | 280.282 | 280.143 | 280.086 | 280.080 | 280.140 | 280.147 | 28 |
| 29 | 280.222 | | 280.229 | 280.258 | 280.268 | 280.306 | 280.317 | 258.886 | 280.148 | 280.048 | 280.137 | 280.158 | 29 |
| 30 | 280.217 | | 280.231 | 280.262 | 280.245 | 280.318 | 280.188 | 280.178 | 280.083 | 280.138 | 280.138 | 280.182 | 30 |
| 31 | 280.223 | | 280.232 | | 280.247 | | 280.214 | 280.188 | | 280.088 | | 280.148 | 31 |
| MEAN | 280.216 | 280.221 | 280.226 | 280.251 | 280.285 | 280.288 | 280.267 | 280.168 | 280.124 | 280.072 | 280.130 | 280.141 | MEAN |
| MAX | 280.223 | 280.228 | 280.232 | 280.262 | 280.328 | 280.412 | 280.343 | 280.251 | 280.228 | 280.148 | 280.168 | 280.158 | MAX |
| MIN | 280.202 | 280.214 | 280.218 | 280.227 | 280.048 | 258.862 | 280.143 | 258.886 | 258.859 | 258.850 | 280.001 | 280.132 | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MEAN, 280.183
MAXIMUM DAILY, 280.412 ON JUN 28
MINIMUM DAILY, 258.850 ON OCT 1
MAXIMUM INSTANTANEOUS,
280.542 AT 15:15 CST ON AUG 24

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 26 22 N
LONG 98 57 00 W

A - MANUAL GAUGE

REGULATED

DRAINAGE AREA,
8 890 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## DAUPHIN RIVER NEAR DAUPHIN RIVER - STATION NO. 05LM005

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.07 B | 2.80 B | 3.308 | 8.988 | 40.3 | 26.7 | 22.8 | 21.0 | 19.8 | 19.8 | 19.0 B | 15.5 B | 1 |
| 2 | 1.88 B | 3.03 B | 3.228 | 8.438 | 40.3 | 22.8 | 23.8 | 20.8 | 20.8 | 19.8 | 11.8 B | 11.8 B | 2 |
| 3 | 1.88 B | 2.88 B | 3.048 | 8.718 | 38.8 | 21.4 | 21.0 | 22.2 | 22.8 | 19.3 | 10.8 B | 13.2 B | 3 |
| 4 | 1.88 B | 1.71 B | 1.948 | 7.488 | 38.1 | 19.8 | 22.8 | 22.8 | 21.8 | 18.8 | 13.0 B | 14.8 B | 4 |
| 5 | 1.88 B | 1.30 B | 1.758 | 7.628 | 30.8 | 23.3 | 22.7 | 19.2 | 20.7 | 18.0 | 13.8 B | 16.4 B | 5 |
| 6 | 1.91 B | 1.06 B | 1.528 | 8.848 | 27.3 | 22.8 | 19.3 | 15.8 | 22.4 | 11.7 | 14.7 B | 13.0 B | 6 |
| 7 | 1.95 B | 0.8008 | 1.558 | 8.818 | 33.4 | 19.1 | 20.0 | 17.0 | 21.3 | 18.8 | 15.5 B | 13.2 B | 7 |
| 8 | 1.88 B | 0.8418 | 1.688 | 8.548 | 32.4 | 16.8 | 20.8 | 17.8 | 20.8 | 18.5 | 16.0 B | 14.4 B | 8 |
| 9 | 1.70 B | 0.8318 | 2.328 | 7.828 | 33.7 | 18.4 | 21.1 | 18.3 | 21.4 | 18.7 | 16.2 B | 14.7 B | 9 |
| 10 | 1.88 B | 1.32 B | 2.618 | 8.808 | 34.8 | 20.0 | 19.7 | 20.0 | 19.0 | 19.1 | 16.8 B | 14.8 B | 10 |
| 11 | 1.88 B | 1.47 B | 2.418 | 8.148 | 41.2 | 20.8 | 20.1 | 20.1 | 20.7 | 18.2 | 13.8 B | 14.4 B | 11 |
| 12 | 1.23 B | 1.61 B | 2.678 | 8.598 | 41.8 | 16.8 | 19.8 | 18.8 | 20.0 | 17.5 | 13.8 B | 13.4 B | 12 |
| 13 | 0.8138 | 1.88 B | 2.888 | 11.1 B | 37.8 | 12.1 | 18.5 | 17.5 | 22.8 | 18.4 | 18.2 B | 13.4 B | 13 |
| 14 | 0.7808 | 2.07 B | 2.988 | 11.5 B | 35.0 | 14.3 | 19.3 | 16.0 | 22.4 | 19.0 | 16.3 B | 13.1 B | 14 |
| 15 | 0.7588 | 2.13 B | 3.198 | 12.8 B | 33.2 | 17.3 | 19.7 | 18.1 | 23.2 | 18.8 | 10.3 B | 13.1 B | 15 |
| 16 | 0.7488 | 2.03 B | 3.768 | 13.7 B | 33.8 | 22.4 | 21.5 | 18.8 | 20.8 | 14.1 | 8.928 | 13.0 B | 16 |
| 17 | 0.8828 | 1.88 B | 4.318 | 13.2 B | 35.9 | 26.0 | 22.5 | 18.0 | 23.2 | 15.1 | 18.4 B | 12.8 B | 17 |
| 18 | 0.8988 | 1.88 B | 4.408 | 15.2 B | 38.4 | 24.0 | 22.1 | 18.8 | 18.4 | 18.3 | 18.2 B | 12.4 B | 18 |
| 19 | 0.8288 | 1.84 B | 4.688 | 16.8 B | 38.9 | 24.8 | 21.4 | 18.4 | 18.8 | 21.3 | 18.2 B | 12.1 B | 19 |
| 20 | 0.8358 | 1.88 B | 4.658 | 25.8 B | 34.5 | 26.0 | 22.3 | 13.2 | 18.8 | 20.3 | 18.5 B | 12.0 B | 20 |
| 21 | 1.07 B | 1.27 B | 4.808 | 34.8 B | 33.8 | 23.4 | 23.2 | 16.8 | 18.8 | 20.3 | 15.5 B | 12.1 B | 21 |
| 22 | 1.37 B | 1.18 B | 4.628 | 47.8 B | 31.2 | 22.5 | 24.5 | 17.7 | 14.5 | 19.8 | 15.8 B | 12.3 B | 22 |
| 23 | 1.88 B | 1.23 B | 4.818 | 47.7 B | 30.0 | 21.8 | 25.8 | 18.0 | 16.5 | 19.2 | 9.038 | 12.1 B | 23 |
| 24 | 1.88 B | 1.57 B | 5.098 | 44.8 | 27.5 | 21.8 | 22.5 | 18.5 | 22.3 | 18.3 | 9.838 | 11.4 B | 24 |
| 25 | 1.73 B | 2.08 B | 5.318 | 44.7 | 21.0 | 21.3 | 22.5 | 18.8 | 18.2 | 18.8 | 14.7 B | 11.0 B | 25 |
| 26 | 1.87 B | 2.13 B | 5.428 | 42.8 | 18.5 | 24.0 | 18.7 | 19.5 | 20.8 | 18.8 | 15.0 B | 11.2 B | 26 |
| 27 | 1.88 B | 2.18 B | 5.178 | 40.8 | 27.1 | 21.4 | 17.8 | 17.7 | 24.1 | 17.3 | 15.0 B | 10.1 B | 27 |
| 28 | 1.83 B | 2.28 B | 5.188 | 40.1 | 24.8 | 22.1 | 20.1 | 20.8 | 20.4 | 18.8 | 14.8 B | 9.878 | 28 |
| 29 | 1.78 B | | 5.388 | 34.7 | 24.5 | 22.0 | 21.3 | 18.9 | 18.5 | 18.5 | 18.1 B | 9.788 | 29 |
| 30 | 2.21 B | | 5.618 | 36.8 | 26.8 | 20.8 | 20.5 | 18.2 | 21.9 | 18.1 | 15.5 B | 9.888 | 30 |
| 31 | 2.10 B | | 5.048 | | 26.5 | | 20.3 | 20.1 | | 20.4 | | 9.478 | 31 |
| TOTAL | 46.543 | 48.142 | 113.12 | 834.65 | 988.8 | 636.3 | 659.2 | 572.9 | 609.6 | 547.3 | 425.68 | 389.41 | TOTAL |
| MEAN | 1.50 | 1.72 | 3.62 | 20.6 | 31.8 | 21.2 | 21.3 | 18.5 | 20.3 | 17.7 | 14.2 | 12.6 | MEAN |
| MAX | 3.21 | 3.03 | 5.81 | 47.7 | 41.8 | 26.7 | 25.8 | 22.8 | 24.1 | 21.3 | 18.8 | 16.8 | MAX |
| MIN | 0.788 | 0.841 | 1.52 | 8.84 | 18.5 | 12.1 | 17.8 | 13.2 | 14.5 | 10.8 | 8.82 | 9.47 | MIN |

### SUMMARY FOR THE YEAR 1988

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 18.8
MAXIMUM DAILY, 47.78 ON APR 23
MINIMUM DAILY, 0.8418 ON FEB 8
MAXIMUM INSTANTANEOUS,
51.98 AT 00:31 CST ON APR 23

TYPE OF GAUGE - RECORDING
LOCATION - LAT 52 00 00 N
LONG 98 19 20 W
DRAINAGE AREA, 52 400 km²

B - ICE CONDITIONS

REGULATED SINCE 1976

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 4 020 | JUL | 57 000 |
| FEB | 4 180 | AUG | 49 500 |
| MAR | 9 880 | SEP | 52 700 |
| APR | 84 000 | OCT | 47 300 |
| MAY | 85 400 | NOV | 38 800 |
| JUN | 55 000 | DEC | 33 600 |

TOTAL DISCHARGE, 489 000 dam³

REMARKS - PREVIOUS TO 1988 PUBLISHED UNDER THE NAME "DAUPHIN RIVER NEAR ANAMA BAY"

## DEAD CREEK NEAR LEE RIVER NORTH OF PINAWA - STATION NO. 05PF005

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.008E | 0.008E | 0.004A | 0.031E | 2.83 A | 1.44 E | 0.482 | 0.138E | 0.015E | 0 E | 0.008E | 0.034E | 1 |
| 2 | 0.008E | 0.007E | 0.004E | 0.027E | 2.10 | 1.10 E | 0.388 | 0.182A | 0.015E | 0 E | 0.007E | 0.031E | 2 |
| 3 | 0.008E | 0.007E | 0.004E | 0.043E | 1.85 A | 0.810 | 0.288 | 0.210E | 0.015E | 0 E | 0.007E | 0.028E | 3 |
| 4 | 0.007E | 0.008E | 0.004E | 0.030A | 1.73 | 0.620 | 0.200 | 0.200E | 0.002E | 0 E | 0.008E | 0.025E | 4 |
| 5 | 0.007E | 0.008E | 0.004E | 0.078A | 1.88 | 0.520 | 0.230 | 0.180E | 0.007A | 0 E | 0.008E | 0.022E | 5 |
| 6 | 0.007A | 0.008A | 0.004A | 0.087E | 1.42 | 0.378A | 0.250 | 0.120E | 0.005E | 0 E | 0.008A | 0.018E | 6 |
| 7 | 0.007E | 0.005E | 0.004E | 0.058E | 1.38 | 0.780 | 0.240 | 0.070E | 0.004E | 0 E | 0.010E | 0.012A | 7 |
| 8 | 0.007E | 0.005E | 0.004E | 0.050E | 1.25 A | 1.18 A | 0.215 | 0.030A | 0.001E | 0 E | 0.020E | 0.012E | 8 |
| 9 | 0.007E | 0.004E | 0.004E | 0.041E | 1.13 | 1.30 | 0.200 | 0.025E | 0.001E | 0 E | 0.030E | 0.011E | 9 |
| 10 | 0.008E | 0.004E | 0.004E | 0.032E | 1.00 A | 1.15 | 0.185A | 0.020E | 0.001E | 0 A | 0.035A | 0.011E | 10 |
| 11 | 0.008E | 0.004E | 0.003E | 0.025A | 0.920 | 1.04 | 0.200E | 0.015E | 0.001E | 0 E | 0.040E | 0.010E | 11 |
| 12 | 0.008A | 0.003E | 0.003E | 0.028E | 0.818A | 0.980 | 0.210E | 0.011E | 0.008A | 0 E | 0.045E | 0.010E | 12 |
| 13 | 0.008E | 0.003E | 0.003E | 1.04 | 0.831 | 1.48 A | 0.205E | 0.012E | 0.005E | 0.001E | 0.050E | 0.010E | 13 |
| 14 | 0.007E | 0.003A | 0.003A | 1.05 | 0.842 | 2.23 A | 0.200E | 0.007E | 0.003E | 0.001E | 0.062A | 0.010E | 14 |
| 15 | 0.008E | 0.004E | 0.003E | 1.04 | 0.680A | 2.18 | 0.187E | 0.007A | 0.002E | 0.001E | 0.048E | 0.010A | 15 |
| 16 | 0.008E | 0.004E | 0.003E | 1.27 | 0.442 | 1.85 A | 0.185E | 0.005E | 0.001E | 0.001E | 0.048E | 0.010E | 16 |
| 17 | 0.008A | 0.005E | 0.003E | 1.18 | 0.442 | 1.58 | 0.184A | 0.005E | 0.001E | 0.001E | 0.043E | 0.010E | 17 |
| 18 | 0.008E | 0.005E | 0.004E | 1.06 | 0.802 | 1.38 | 0.177E | 0.005E | 0 E | 0.001E | 0.050E | 0.010E | 18 |
| 19 | 0.008E | 0.008E | 0.004E | 1.02 | 0.850 | 0.858A | 0.180E | 0.010E | 0.002A | 0.001E | 0.047E | 0.010E | 18 |
| 20 | 0.008E | 0.008E | 0.004E | 1.18 | 0.585 | 0.820 | 0.143E | 0.020E | 0.002E | 0.002E | 0.043E | 0.010A | 20 |
| 21 | 0.008E | 0.007A | 0.004A | 1.28 | 0.480 | 0.810 | 0.128E | 0.040E | 0 A | 0.002E | 0.040A | 0.010E | 21 |
| 22 | 0.008E | 0.007E | 0.004E | 1.61 A | 0.402 | 0.830 | 0.108E | 0.020A | 0 E | 0.003E | 0.040E | 0.010E | 22 |
| 23 | 0.008E | 0.007E | 0.004E | 1.85 | 0.380 | 0.858 | 0.082E | 0.015E | 0 E | 0.003E | 0.040E | 0.009E | 23 |
| 24 | 0.007E | 0.007E | 0.005E | 2.30 | 0.382A | 0.785 | 0.075E | 0.010E | 0 E | 0.004E | 0.040E | 0.008E | 24 |
| 25 | 0.007E | 0.008E | 0.005E | 2.85 A | 1.09 E | 0.780 | 0.058E | 0.008E | 0 E | 0.004A | 0.040E | 0.008E | 25 |
| 26 | 0.007E | 0.008E | 0.008E | 2.85 | 1.43 E | 0.780 | 0.038A | 0.008A | 0 E | 0.004E | 0.040E | 0.008E | 26 |
| 27 | 0.007E | 0.008E | 0.008E | 4.52 A | 3.08 E | 0.770 | 0.026E | 0.008E | 0 E | 0.005E | 0.040E | 0.008E | 27 |
| 28 | 0.008E | 0.004E | 0.007A | 2.85 | 5.18 E | 0.880 | 0.017E | 0.010E | 0 E | 0.005E | 0.040E | 0.008E | 28 |
| 29 | 0.008E | | 0.013E | 2.84 | 3.48 A | 0.800 | 0.028E | 0.011E | 0 E | 0.008E | 0.040A | 0.008E | 29 |
| 30 | 0.008E | | 0.018E | 2.70 | 2.13 E | 0.530 | 0.058E | 0.012A | 0 E | 0.008E | 0.037E | 0.008E | 30 |
| 31 | 0.008A | | 0.026E | | 1.81 E | | 0.085E | 0.010E | | 0.008A | | 0.008E | 31 |
| TOTAL | 0.218 | 0.148 | 0.171 | 34.700 | 41.306 | 31.178 | 5.241 | 1.422 | 0.091 | 0.057 | 1.011 | 0.401 | TOTAL |
| MEAN | 0.007 | 0.005 | 0.008 | 1.15 | 1.33 | 1.04 | 0.188 | 0.048 | 0.003 | 0.002 | 0.034 | 0.013 | MEAN |
| MAX | 0.008 | 0.008 | 0.026 | 4.52 | 5.18 | 2.23 | 0.482 | 0.210 | 0.015 | 0.008 | 0.062 | 0.034 | MAX |
| MIN | 0.005 | 0.003 | 0.003 | 0.025 | 0.380 | 0.378 | 0.017 | 0.005 | 0 | 0 | 0.008 | 0.008 | MIN |

### SUMMARY FOR THE YEAR 1988

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.318
MAXIMUM DAILY, 5.18E ON MAY 28
MINIMUM DAILY, 0E ON SEP 18

DATA CONTRIBUTED BY -
ATOMIC ENERGY OF CANADA

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 15 04 N
LONG 95 53 10 W

A - MANUAL GAUGE

E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 19.7 | JUL | 483 |
| FEB | 12.8 | AUG | 123 |
| MAR | 14.8 | SEP | 7.88 |
| APR | 3 000 | OCT | 4.82 |
| MAY | 3 570 | NOV | 87.4 |
| JUN | 2 650 | DEC | 34.8 |

TOTAL DISCHARGE, 10 000 dam³

## DEADHORSE CREEK AT MORDEN - STATION NO. 05OC015

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1969

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.0 | 0 B | 0.004 | 0 | 0.001 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0.0 | 0 B | 0.004 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0.0 | 0.0018 | 0.004 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0.0 | 0.0018 | 0.004 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0.0 | 0.0038 | 0.004 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0.0 | 0.0048 | 0.013 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0.0 | 0.0048 | 0.008 | 0.007 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0.0 | 0.0038 | 0.008 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0.0 | 0.0028 | 0.005 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0.0 | 0.0078 | 0.004 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0.0 | 0.0088 | 0.002 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0.0 | 0.0218 | 0.002 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0.0 | 0.0878 | 0.002 | 0.014 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0.0 | 0.0818 | 0.001 | 0.006 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0.0 | 0.0428 | 0.001 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0.0 | 0.027 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0.0 | 0.018 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0.0 | 0.016 | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0.0 | 0.017 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0.0 | 0.018 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0.0 | 0.017 | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0.0 | 0.016 | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0.0 | 0.014 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0.0 | 0.018 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0.0 | 0.012 | 0.002 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0.0 | 0.009 | 0.002 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0.0 | 0.007 | 0.001 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0.0 | 0.006 | 0.003 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0.0 | 0.006 | 0.002 | 0.010 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0.0 | 0.005 | 0.001 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0.0 | | 0.001 | | 0 | 0 | | 0 | --- | --- | 31 |
| TOTAL | --- | --- | 0 | 0.419 | 0.088 | 0.071 | 0.001 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.014 | 0.003 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.081 | 0.013 | 0.014 | 0.001 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.003
MAXIMUM DAILY, 0.0818 ON APR 14
MINIMUM DAILY, 0.0 ON MAR 1

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 11 47 N
LONG 98 06 38 W
DRAINAGE AREA, 138 km²

B - ICE CONDITIONS

REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0.09 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 36.2 | OCT | 0 |
| MAY | 8.29 | NOV | --- |
| JUN | 6.13 | DEC | --- |

TOTAL DISCHARGE, 50.7 dam³

## DEADHORSE CREEK NEAR ROSENFELD - STATION NO. 05OC016

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1969

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.0 | 0.0028 | 0.237 | 0.004 | 0.033 | 0 | 0 E | 0.022 | --- | --- | 1 |
| 2 | --- | --- | 0.0 | 0.0048 | 0.145 | 0.003 | 0.028 | 0 | 0 E | 0.018 | --- | --- | 2 |
| 3 | --- | --- | 0.0 | 0.0078 | 0.079 | 0.244 | 0.025 | 0 | 0 E | 0.011 | --- | --- | 3 |
| 4 | --- | --- | 0.0 | 0.0108 | 0.058 | 0.438 | 0.023 | 0 | 0 E | 0.012 | --- | --- | 4 |
| 5 | --- | --- | 0.0 | 0.0138 | 0.037 | 0.449 | 0.024 | 0 | 0 E | 0.013 | --- | --- | 5 |
| 6 | --- | --- | 0.0 | 0.0388 | 0.026 | 0.443 | 0.021 | 0 | 0 A | 0.014 | --- | --- | 6 |
| 7 | --- | --- | 0.0 | 0.0448 | 0.016 | 0.446 | 0.018 | 0 | 0 | 0.011 | --- | --- | 7 |
| 8 | --- | --- | 0.0 | 0.0488 | 0.017 | 0.386 | 0.018 | 0 | 0 | 0.011 | --- | --- | 8 |
| 9 | --- | --- | 0.0 | 0.0498 | 0.016 | 0.305 | 0.017 | 0 | 0 | 0.014 | --- | --- | 9 |
| 10 | --- | --- | 0.0 | 0.0808 | 0.014 | 0.238 | 0.014 | 0 | 0 | 0.011 | --- | --- | 10 |
| 11 | --- | --- | 0.0 | 0.0618 | 0.014 | 0.200 | 0.012 | 0 | 0 | 0.013 | --- | --- | 11 |
| 12 | --- | --- | 0.0 | 0.1458 | 0.015 | 0.177 | 0.009 | 0 | 0 | 0.011 | --- | --- | 12 |
| 13 | --- | --- | 0.0 | 1.20 B | 0.013 | 0.154 | 0.008 | 0 | 0 | 0.010 | --- | --- | 13 |
| 14 | --- | --- | 0.0 | 2.87 B | 0.011 | 0.122 | 0.003 | 0 | 0 | 0.011 | --- | --- | 14 |
| 15 | --- | --- | 0.0 | 11.7 B | 0.011 | 0.098 | 0 | 0 | 0 | 0.013 | --- | --- | 15 |
| 16 | --- | --- | 0.0 | 23.8 B | 0.011 | 0.084 | 0 | 0 | 0 | 0.013 | --- | --- | 16 |
| 17 | --- | --- | 0.0 | 10.3 B | 0.010 | 0.076 | 0 | 0 | 0 | 0.011 | --- | --- | 17 |
| 18 | --- | --- | 0.0 | 5.55 B | 0.010 | 0.083 | 0 | 0 | 0 | 0.010 | --- | --- | 18 |
| 19 | --- | --- | 0.0 | 3.44 B | 0.010 | 0.082 | 0 | 0 | 0 | 0.010 | --- | --- | 19 |
| 20 | --- | --- | 0.0 | 2.22 B | 0.008 | 0.078 | 0 | 0 | 0 | 0.008 | --- | --- | 20 |
| 21 | --- | --- | 0.0 | 1.65 B | 0.001 | 0.071 | 0 | 0 | 0 | 0.008 | --- | --- | 21 |
| 22 | --- | --- | 0.0 | 1.53 B | 0.002 | 0.068 | 0 | 0 | 0 | 0.007 | --- | --- | 22 |
| 23 | --- | --- | 0.0 | 1.34 | 0.002 | 0.060 | 0 | 0 | 0 | 0.008 | --- | --- | 23 |
| 24 | --- | --- | 0.0 | 1.14 | 0.003 | 0.052 | 0 | 0 | 0 | 0.008 | --- | --- | 24 |
| 25 | --- | --- | 0.0 | 1.04 | 0.008 | 0.048 | 0 | 0 | 0 | 0.008 | --- | --- | 25 |
| 26 | --- | --- | 0.0 | 0.885 | 0.005 | 0.041 | 0 | 0A | 0 | 0.005 | --- | --- | 26 |
| 27 | --- | --- | 0.0 | 0.877 | 0.004 | 0.038 | 0 | 0E | 0.011 | 0.007 | --- | --- | 27 |
| 28 | --- | --- | 0.0 | 0.861 | 0.005 | 0.038 | 0 | 0E | 0.004 | 0.003 | --- | --- | 28 |
| 29 | --- | | 0.0 | 0.455 | 0.003 | 0.040 | 0 | 0E | 0.043 | 0.002 | --- | --- | 29 |
| 30 | --- | | 0.0 | 0.333 | 0.002 | 0.038 | 0 | 0E | 0.023 | 0.002E | --- | --- | 30 |
| 31 | --- | | 0.0 | | 0.002 | | 0 | 0E | | 0.001E | | --- | 31 |
| TOTAL | --- | --- | 0 | 71.814 | 0.784 | 4.579 | 0.262 | 0 | 0.171 | 0.288 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 2.38 | 0.028 | 0.153 | 0.008 | 0 | 0.008 | 0.010 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 23.8 | 0.237 | 0.449 | 0.033 | 0 | 0.084 | 0.022 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.002 | 0.001 | 0.003 | 0 | 0 | 0 | 0.001 | --- | --- | MIN |

SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.317
MAXIMUM DAILY, 23.68 ON APR 16
MINIMUM DAILY, 0.0 ON MAR 1
MAXIMUM INSTANTANEOUS,
29.88 AT 02:00 CST ON APR 16

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 15 10 N
LONG 97 33 00 W
DRAINAGE AREA, 813 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 21.8 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 14.6 |
| APR | 190 | OCT | 35.7 |
| MAY | 88.8 | NOV | --- |
| JUN | 398 | DEC | --- |

TOTAL DISCHARGE, 8 720 dam³

REMARKS - PREVIOUS TO 1968 PUBLISHED UNDER THE NAME "HESPELER FLOODWAY NEAR ROSENFELD"

## DEER RIVER NORTH OF BELCHER - STATION NO. 05FD002

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5100 | 0.4488 | 0.3188 | 0.1888 | 0.1708 | 81.1 | 34.5 | --- | --- | --- | 12.5 B | 3.28 B | 1 |
| 2 | 0.5058 | 0.4438 | 0.3188 | 0.1878 | 0.1738 | 85.0 | 35.2 | --- | --- | --- | 12.0 B | 2.18 B | 2 |
| 3 | 0.5585 | 0.4378 | 0.3068 | 0.1848 | 0.1758 | 83.5 | 31.4 | --- | --- | --- | 11.5 B | 2.10 B | 3 |
| 4 | 0.5588 | 0.4358 | 0.3088 | 0.1818 | 0.1748 | 81.2 | 35.6 | --- | --- | 11.8A | 10.7 B | 1.98 B | 4 |
| 5 | 0.5628 | 0.4288 | 0.3048 | 0.1788 | 0.1878 | 78.1 | 38.4 | --- | --- | 12.0 | 10.2 B | 1.88 B | 5 |
| 6 | 0.5748 | 0.4238 | 0.2988 | 0.1788 | 0.1988 | 74.4 | 42.7 | --- | --- | 12.5 | 9.858 | 1.84 B | 6 |
| 7 | 0.5888 | 0.4218 | 0.2928 | 0.1758 | 0.2148 | 68.8 | 42.5 | --- | --- | 12.5 | 8.578 | 1.78 B | 7 |
| 8 | 0.5638 | 0.4188 | 0.2908 | 0.1738 | 0.2428 | 64.2 | 40.0 | --- | --- | 12.1 | 8.488 | 1.72 B | 8 |
| 9 | 0.5808 | 0.4088 | 0.2848 | 0.1708 | 0.2818 | 60.1 | 38.7 | --- | --- | 12.0 | 8.008 | 1.68 B | 9 |
| 10 | 0.5648 | 0.4078 | 0.2818 | 0.1878 | 0.3188 | 55.2 | 32.5 | --- | --- | 12.1 | 7.548 | 1.58 B | 10 |
| 11 | 0.5488 | 0.4048 | 0.2788 | 0.1848 | 0.3658 | 51.8 | 28.7 | --- | --- | 12.2 | 7.108 | 1.52 B | 11 |
| 12 | 0.5408 | 0.4018 | 0.2768 | 0.1818 | 0.4018 | 47.6 | 25.5 | --- | --- | 12.8 | 6.688 | 1.48 B | 12 |
| 13 | 0.5328 | 0.3988 | 0.2708 | 0.1508 | 0.5138 | 44.7 | 23.2 | --- | --- | 13.0 | 6.228 | 1.43 B | 13 |
| 14 | 0.5278 | 0.3838 | 0.2678 | 0.1488 | 0.8248 | 42.1 | 21.3 | --- | --- | 12.5 | 5.788 | 1.37 B | 14 |
| 15 | 0.5218 | 0.3878 | 0.2628 | 0.1488 | 0.8478 | 39.7 | 18.9A | --- | --- | 13.2 | 5.698 | 1.31 B | 15 |
| 16 | 0.5188 | 0.3848 | 0.2538 | 0.1488 | 72.4 B | 36.8 | --- | --- | --- | 11.0 | 5.278 | 1.28 B | 16 |
| 17 | 0.5158 | 0.3798 | 0.2518 | 0.1488 | 182 B | 34.7 | --- | --- | --- | 15.5 | 4.908 | 1.27 B | 17 |
| 18 | 0.5138 | 0.3728 | 0.2488 | 0.1428 | 204 B | 36.3 | --- | --- | --- | 15.5 | 4.608 | 1.21 B | 18 |
| 19 | 0.5078 | 0.3658 | 0.2488 | 0.1428 | 208 B | 59.8 | --- | --- | --- | 13.6 | 4.318 | 1.15 B | 19 |
| 20 | 0.5048 | 0.3598 | 0.2428 | 0.1428 | 208 B | 76.5 | --- | --- | --- | 14.0 | 4.138 | 1.14 B | 20 |
| 21 | 0.4988 | 0.3578 | 0.2408 | 0.1428 | 201 | 80.2 | --- | --- | --- | 13.0 | 3.908 | 1.12 B | 21 |
| 22 | 0.4938 | 0.3548 | 0.2348 | 0.1488 | 182 | 78.2 | --- | --- | --- | 12.3 | 3.738 | 1.10 B | 22 |
| 23 | 0.4858 | 0.3518 | 0.2318 | 0.1488 | 161 | 67.6 | --- | --- | --- | 12.1 | 3.618 | 1.07 B | 23 |
| 24 | 0.4828 | 0.3488 | 0.2288 | 0.1508 | 138 | 59.4 | --- | --- | --- | 12.0 | 3.318 | 1.06 B | 24 |
| 25 | 0.4788 | 0.3468 | 0.2288 | 0.1508 | 125 | 51.7 | --- | --- | --- | 12.1 | 3.188 | 1.04 B | 25 |
| 26 | 0.4718 | 0.3378 | 0.2208 | 0.1588 | 118 | 44.3 | --- | --- | --- | 12.5 | 3.018 | 1.02 B | 26 |
| 27 | 0.4858 | 0.3318 | 0.2148 | 0.1588 | 105 | 37.6 | --- | --- | --- | 12.9 | 2.888 | 1.00 B | 27 |
| 28 | 0.4628 | 0.3238 | 0.2098 | 0.1848 | 83.4 | 32.7 | --- | --- | --- | 13.2 | 2.848 | 0.8728 | 28 |
| 29 | 0.4608 | | 0.2068 | 0.1878 | 64.8 | 29.2 | --- | --- | --- | 13.28 | 2.518 | 0.8538 | 29 |
| 30 | 0.4578 | | 0.1988 | 0.1708 | 78.9 | 26.4 | --- | --- | --- | 13.18 | 2.448 | 0.8548 | 30 |
| 31 | 0.4518 | | 0.1928 | | 76.1 | | --- | --- | --- | 12.78 | | 0.8408 | 31 |
| TOTAL | 16.227 | 10.857 | 7.988 | 4.811 | 2 246.288 | 1 710.2 | --- | --- | --- | --- | 185.14 | 43.478 | TOTAL |
| MEAN | 0.533 | 0.388 | 0.258 | 0.180 | 72.5 | 57.0 | --- | --- | --- | --- | 5.17 | 1.40 | MEAN |
| MAX | 0.610 | 0.448 | 0.318 | 0.188 | 208 | 85.0 | --- | --- | --- | --- | 12.5 | 3.28 | MAX |
| MIN | 0.451 | 0.323 | 0.192 | 0.142 | 0.170 | 26.4 | --- | --- | --- | --- | 2.44 | 0.840 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MAXIMUM DAILY, 208B ON MAY 19
MINIMUM DAILY, 0.1428 ON APR 16

### SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 55 00 54 N
LONG 94 11 44 W
DRAINAGE AREA, 1 880 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 1 400 | JUL | --- |
| FEB | 936 | AUG | --- |
| MAR | 690 | SEP | --- |
| APR | 416 | OCT | --- |
| MAY | 194 000 | NOV | 16 000 |
| JUN | 148 000 | DEC | 3 750 |

## DELORAINE RESERVOIR NEAR DELORAINE - STATION NO. 05MG014

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 538.188E | 538.351 | 538.434 | 538.318 | 538.307 | 538.087 | 538.885 | 538.708 | --- | --- | 1 |
| 2 | --- | --- | 538.188E | 538.344 | 538.430 | 538.314 | 538.308 | 538.078 | 538.848 | 538.698 | --- | --- | 2 |
| 3 | --- | --- | 538.184E | 538.943 | 538.427 | 538.308 | 538.289 | 538.068 | 538.858 | 538.698 | --- | --- | 3 |
| 4 | --- | --- | 538.182E | 538.180 | 538.424 | 538.301 | 538.291 | 538.054 | 538.852 | 538.893 | --- | --- | 4 |
| 5 | --- | --- | 538.188E | 538.260 | 538.418 | 538.298 | 538.281 | 538.045 | 538.846 | 538.888 | --- | --- | 5 |
| 6 | --- | --- | 538.187E | 538.338 | 538.411 | 538.285 | 538.271 | 538.038 | 538.840 | 538.884 | --- | --- | 6 |
| 7 | --- | --- | 538.185E | 538.373 | 538.407 | 538.286 | 538.262 | 538.028 | 538.832 | 538.880 | --- | --- | 7 |
| 8 | --- | --- | 538.153A | 538.382 | 538.405 | 538.288 | 538.257 | 538.017 | 538.823 | 538.877 | --- | --- | 8 |
| 9 | --- | --- | 538.184 | 538.384 | 538.401 | 538.280 | 538.252 | 538.010 | 538.816 | 538.873 | --- | --- | 9 |
| 10 | --- | --- | 538.188 | 538.386 | 538.398 | 538.273 | 538.246 | 538.988 | 538.808 | 538.870 | --- | --- | 10 |
| 11 | --- | --- | 538.183 | 538.388 | 538.388 | 538.270 | 538.240 | 538.988 | 538.818 | 538.884 | --- | --- | 11 |
| 12 | --- | --- | 538.186 | 538.391 | 538.378 | 538.277 | 538.232 | 538.981 | 538.818 | 538.881 | --- | --- | 12 |
| 13 | --- | --- | 538.187 | 538.394 | 538.370 | 538.266 | 538.226 | 538.980 | 538.810 | 538.857 | --- | --- | 13 |
| 14 | --- | --- | 538.186 | 538.403 | 538.364 | 538.278 | 538.217 | 538.977 | 538.804 | 538.858 | --- | --- | 14 |
| 15 | --- | --- | 538.184 | 538.416 | 538.360 | 538.274 | 538.211 | 538.988 | 538.798 | 538.851 | --- | --- | 15 |
| 16 | --- | --- | 538.188 | 538.424 | 538.384 | 538.288 | 538.204 | 538.881 | 538.785 | 538.847 | --- | --- | 16 |
| 17 | --- | --- | 538.180 | 538.427 | 538.376 | 538.283 | 538.198 | 538.952 | 538.781 | 538.843 | --- | --- | 17 |
| 18 | --- | --- | 538.188 | 538.427 | 538.376 | 538.281 | 538.188 | 538.943 | 538.783 | 538.840 | --- | --- | 18 |
| 19 | --- | --- | 538.187 | 538.427 | 538.374 | 538.268 | 538.183 | 538.938 | 538.778 | 538.836 | --- | --- | 19 |
| 20 | --- | --- | 538.185 | 538.428 | 538.368 | 538.248 | 538.178 | 538.929 | 538.775 | 538.827 | --- | --- | 20 |
| 21 | --- | --- | 538.182 | 538.428 | 538.381 | 538.244 | 538.184 | 538.924 | 538.770 | 538.827 | --- | --- | 21 |
| 22 | --- | --- | 538.181 | 538.435 | 538.388 | 538.240 | 538.184 | 538.918 | 538.784 | 538.820 | --- | --- | 22 |
| 23 | --- | --- | 538.181 | 538.431 | 538.382 | 538.235 | 538.148 | 538.911 | 538.788 | 538.818 | --- | --- | 23 |
| 24 | --- | --- | 538.148 | 538.442 | 538.367 | 538.231 | 538.144 | 538.902 | 538.747 | 538.817 | --- | --- | 24 |
| 25 | --- | --- | 538.183 | 538.446 | 538.359 | 538.237 | 538.135 | 538.898 | 538.738 | 538.811 | --- | --- | 25 |
| 26 | --- | --- | 538.177 | 538.451 | 538.357 | 538.231 | 538.124 | 538.889 | 538.735 | 538.808 | --- | --- | 26 |
| 27 | --- | --- | 538.238 | 538.448 | 538.352 | 538.228 | 538.114 | 538.882 | 538.728 | 538.809 | --- | --- | 27 |
| 28 | --- | 538.170A | 538.247 | 538.444 | 538.344 | 538.220 | 538.111 | 538.877 | 538.720 | 538.807 | --- | --- | 28 |
| 29 | --- | | 538.285 | 538.440 | 538.335 | 538.382 | 538.108 | 538.868 | 538.715 | 538.805 | --- | --- | 29 |
| 30 | --- | | 538.258 | 538.437 | 538.328 | 538.300 | 538.103 | 538.868 | 538.711 | 538.803 | --- | --- | 30 |
| 31 | --- | | 538.283 | | 538.328 | | 538.097 | 538.860 | | 538.598A | | --- | 31 |
| MEAN | --- | --- | 538.174 | 538.327 | 538.377 | 538.270 | 538.202 | 538.982 | 538.781 | 538.848 | --- | --- | MEAN |
| MAX | --- | --- | 538.283 | 538.451 | 538.434 | 538.318 | 538.307 | 538.087 | 538.858 | 538.708 | --- | --- | MAX |
| MIN | --- | --- | 538.148 | 538.351 | 538.328 | 538.220 | 538.097 | 538.860 | 538.711 | 538.598 | --- | --- | MIN |

WATER LEVELS IN METRES

MAXIMUM DAILY, 538.451 ON APR 26
MINIMUM DAILY, 538.148 ON MAR 24
MAXIMUM INSTANTANEOUS,
538.452 AT 05:44 CST ON APR 26

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1963 ADJ.)

### SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 08 50 N
LONG 100 24 40 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED

DRAINAGE AREA,
78.7 km²

## DENNIS LAKE NEAR MALONTON - STATION NO. 05BB801

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 285.581 | 285.483 | 285.701E | 285.681 | --- | 285.438 | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 285.648 | 285.483 | 285.701E | 285.578 | --- | 285.438 | --- | --- | 2 |
| 3 | --- | --- | --- | --- | 285.598 | 285.480 | 285.700 | 285.587 | --- | 285.417 | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 285.572 | 285.488 | 285.678 | 285.581A | --- | 285.414 | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 285.581 | 285.472 | 285.713 | --- | --- | 285.429 | --- | --- | 5 |
| 6 | --- | --- | --- | --- | 285.538 | 285.488 | 285.708 | --- | --- | 285.444 | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 285.530 | 285.496 | 285.681 | --- | --- | 285.420 | --- | --- | 7 |
| 8 | --- | --- | 285.587A | --- | 285.533 | 285.490 | 285.688 | --- | 285.481A | 285.414 | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 285.527 | 285.467 | 285.681 | --- | 285.475 | 285.423 | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 285.511 | 285.481 | 285.688 | --- | 285.488 | 285.414 | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 285.481 | 285.475 | 285.673 | --- | 285.488 | 285.453A | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 285.487 | 285.521 | 285.885 | --- | 285.482 | --- | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 285.496 | 285.726 | 285.878 | --- | 285.455 | --- | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 285.498 | 285.740 | 285.670 | --- | 285.493 | --- | --- | --- | 14 |
| 15 | --- | --- | --- | --- | 285.489 | 285.740 | 285.884 | --- | 285.490 | --- | --- | --- | 15 |
| 16 | --- | --- | --- | --- | 285.481 | 285.725 | 285.856 | --- | 285.444 | --- | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 285.468 | 285.725 | 285.851 | --- | 285.432 | --- | --- | --- | 17 |
| 18 | --- | --- | --- | --- | 285.490 | 285.734 | 285.848 | --- | 285.441 | --- | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 285.490 | 285.725 | 285.842 | --- | 285.441 | --- | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 285.505 | 285.715 | 285.838 | --- | 285.438 | --- | --- | --- | 20 |
| 21 | --- | --- | --- | --- | 285.487 | 285.734 | 285.830 | --- | 285.441 | --- | --- | --- | 21 |
| 22 | --- | --- | --- | --- | 285.493 | 285.722 | 285.818 | --- | 285.438 | --- | --- | --- | 22 |
| 23 | --- | --- | --- | --- | 285.484 | 285.715 | 285.809 | --- | 285.432 | --- | --- | --- | 23 |
| 24 | --- | --- | --- | --- | 285.487 | 285.708 | 285.803 | --- | 285.435 | --- | --- | --- | 24 |
| 25 | --- | --- | --- | --- | 285.554 | 285.703 | 285.803 | --- | 285.447 | --- | --- | --- | 25 |
| 26 | --- | --- | --- | --- | 285.538 | 285.703 | 285.812 | --- | 285.428 | --- | --- | --- | 26 |
| 27 | --- | --- | --- | 285.542A | 285.511 | 285.703E | 285.697 | --- | 285.420 | --- | --- | --- | 27 |
| 28 | --- | --- | --- | 285.544 | 285.530 | 285.703E | 285.681 | --- | 285.438 | --- | --- | --- | 28 |
| 29 | --- | --- | --- | 285.540 | 285.505 | 285.703E | 285.544 | --- | 285.420 | --- | --- | --- | 29 |
| 30 | --- | --- | --- | 285.587 | 285.498 | 285.702E | 285.584 | --- | 285.417 | --- | --- | --- | 30 |
| 31 | --- | | --- | | 285.498 | | 285.581 | --- | | --- | --- | --- | 31 |
| MEAN | --- | --- | --- | --- | 285.513 | 285.628 | 285.850 | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 285.581 | 285.740 | 285.712 | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 285.488 | 285.488 | 285.581 | --- | --- | --- | --- | --- | MIN |

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 34 44 N
LONG 97 21 24 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

A - MANUAL GAUGE
E - ESTIMATED
NATURAL FLOW
DRAINAGE AREA, 287 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## DEVILS CREEK NEAR LISAU - STATION NO. 05BJ018

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.0038 | 0.0028 | 0.271 | 0.071A | 0.058 | 0.027 | 0.010 | 0.013A | --- | --- | 1 |
| 2 | --- | --- | 0.0038 | 0.0038 | 0.230 | 0.058A | 0.050 | 0.023 | 0.013 | 0.017E | --- | --- | 2 |
| 3 | --- | --- | 0.0038 | 0.0048 | 0.581 | 0.067A | 0.048 | 0.024 | 0.011 | 0.020A | --- | --- | 3 |
| 4 | --- | --- | 0.0028 | 0.0068 | 0.397 | 0.051A | 0.044 | 0.023 | 0.014 | 0.022E | --- | --- | 4 |
| 5 | --- | --- | 0.0038 | 0.0138 | 0.233 | 0.052A | 0.047 | 0.021 | 0.013 | 0.024A | --- | --- | 5 |
| 6 | --- | --- | 0.0028 | 0.0178 | 0.181 | 0.053A | 0.049 | 0.020 | 0.012 | 0.023E | --- | --- | 6 |
| 7 | --- | --- | 0.0028 | 0.0158 | 0.175 | 0.107A | 0.050 | 0.021 | 0.018 | 0.021E | --- | --- | 7 |
| 8 | --- | --- | 0.0028 | 0.0148 | 0.122 | 0.118A | 0.052 | 0.020 | 0.014 | 0.018A | --- | --- | 8 |
| 9 | --- | --- | 0.0038 | 0.0128 | 0.108 | 0.108 | 0.048 | 0.018 | 0.013 | 0.021E | --- | --- | 9 |
| 10 | --- | --- | 0.0058 | 0.0118 | 0.098 | 0.108 | 0.047 | 0.018 | 0.012 | 0.024A | --- | --- | 10 |
| 11 | --- | --- | 0.0068 | 0.0108 | 0.078 | 0.113 | 0.048 | 0.018 | 0.013 | 0.020A | --- | --- | 11 |
| 12 | --- | --- | 0.0058 | 0.0238 | 0.088 | 0.141 | 0.047 | 0.014 | 0.014 | 0.021 | --- | --- | 12 |
| 13 | --- | --- | 0.0058 | 0.0838 | 0.088A | 0.158 | 0.048 | 0.021 | 0.013 | 0.017 | --- | --- | 13 |
| 14 | --- | --- | 0.0048 | 0.1188 | 0.082A | 0.138 | 0.041 | 0.020 | 0.011 | 0.018 | --- | --- | 14 |
| 15 | --- | --- | 0.0048 | 3.20 B | 0.081A | 0.088 | 0.038 | 0.018 | 0.020A | 0.018 | --- | --- | 15 |
| 16 | --- | --- | 0.0038 | 3.81 B | 0.088A | 0.100 | 0.034 | 0.017 | 0.018A | 0.025 | --- | --- | 16 |
| 17 | --- | --- | 0.0038 | 4.86 B | 0.084A | 0.103 | 0.032 | 0.016 | 0.018A | 0.028 | --- | --- | 17 |
| 18 | --- | --- | 0.0038 | 5.52 B | 0.083A | 0.105 | 0.028 | 0.015 | 0.018A | 0.032 | --- | --- | 18 |
| 19 | --- | --- | 0.0038 | 5.27 B | 0.081A | 0.101 | 0.030 | 0.018 | 0.018A | 0.018 | --- | --- | 19 |
| 20 | --- | --- | 0.0028 | 5.86 B | 0.088A | 0.092 | 0.028 | 0.021 | 0.019A | 0.018 | --- | --- | 20 |
| 21 | --- | --- | 0.0038 | 5.10 B | 0.084A | 0.088 | 0.025 | 0.023 | 0.019A | 0.021 | --- | --- | 21 |
| 22 | --- | --- | 0.0028 | 4.81 B | 0.082A | 0.092 | 0.026 | 0.020 | 0.021A | 0.018 | --- | --- | 22 |
| 23 | --- | --- | 0.0038 | 3.93 | 0.084A | 0.087 | 0.026 | 0.018 | 0.023A | 0.021 | --- | --- | 23 |
| 24 | --- | --- | 0.0028 | 2.38 | 0.081A | 0.081 | 0.027 | 0.014 | 0.028A | 0.019 | --- | --- | 24 |
| 25 | --- | --- | 0.0048 | 1.78 | 0.087A | 0.081 | 0.027 | 0.017 | 0.028A | 0.017 | --- | --- | 25 |
| 26 | --- | --- | 0.0058 | 2.58 | 0.142A | 0.085 | 0.027 | 0.018 | 0.020A | 0.018 | --- | --- | 26 |
| 27 | --- | --- | 0.0058 | 1.18 | 0.142A | 0.080 | 0.028 | 0.012 | 0.018A | 0.020 | --- | --- | 27 |
| 28 | --- | --- | 0.0048 | 0.878 | 0.118A | 0.078 | 0.031 | 0.014 | 0.018A | 0.017 | --- | --- | 28 |
| 29 | --- | | 0.0038 | 0.682 | 0.108A | 0.088 | 0.033 | 0.014 | 0.024A | 0.018 | --- | --- | 29 |
| 30 | --- | | 0.0028 | 0.368 | 0.088A | 0.081 | 0.029 | 0.012 | 0.018A | 0.018A | --- | --- | 30 |
| 31 | --- | | 0.0028 | | 0.078A | | 0.029 | 0.008 | | 0.018E | | --- | 31 |
| TOTAL | --- | --- | 0.095 | 53.841 | 4.058 | 2.834 | 1.178 | 0.580 | 0.500 | 0.625 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.003 | 1.78 | 0.131 | 0.094 | 0.038 | 0.018 | 0.017 | 0.020 | --- | --- | MEAN |
| MAX | --- | --- | 0.006 | 5.37 | 0.581 | 0.158 | 0.058 | 0.027 | 0.028 | 0.032 | --- | --- | MAX |
| MIN | --- | --- | 0.002 | 0.003 | 0.051 | 0.051 | 0.026 | 0.008 | 0.010 | 0.013 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.258
MAXIMUM DAILY, 5.370 ON APR 18
MINIMUM DAILY, 0.0028 ON MAR 4

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 11 40 N
LONG 98 43 50 W
DRAINAGE AREA, 230 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 102 |
| FEB | --- | AUG | 46.4 |
| MAR | 8.47 | SEP | 43.2 |
| APR | 4 830 | OCT | 54.0 |
| MAY | 350 | NOV | --- |
| JUN | 245 | DEC | --- |

TOTAL DISCHARGE, 5 480 dam³

## DOG LAKE NEAR VOGAR - STATION NO. 06LH008

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 247.138 | 247.094 | 247.104 | 246.972 | --- | 246.877 | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 247.138 | 247.091 | 247.097 | 246.978 | --- | 246.868 | --- | --- | 2 |
| 3 | --- | --- | --- | --- | 247.130 | 247.073 | 247.088 | 246.984 | --- | 246.896 | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 247.125 | 247.082 | 247.078 | 246.938A | --- | 246.873 | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 247.142 | 247.087 | 247.087 | 246.981 | 246.909A | 246.818 | --- | --- | 5 |
| 6 | --- | --- | --- | 247.204A | 247.150 | 247.109 | 247.085 | 246.938A | 246.918 | 246.828 | --- | --- | 6 |
| 7 | --- | --- | --- | 247.208 | 247.152 | 247.117 | 247.068 | 246.948 | 246.877 | 246.875 | --- | --- | 7 |
| 8 | --- | --- | --- | 247.201 | 247.144 | 247.101 | 247.058 | 246.951 | 246.887 | 246.877 | --- | --- | 8 |
| 9 | --- | --- | --- | 247.182 | 247.150 | 247.097 | 247.058 | 246.955 | 246.881 | 246.861 | --- | --- | 9 |
| 10 | --- | --- | --- | 247.168 | 247.152 | 247.089 | 247.059 | 246.948 | 246.910 | 246.877 | --- | --- | 10 |
| 11 | --- | --- | --- | 247.164 | 247.140 | 247.133 | 247.088 | 246.949 | 246.913 | 246.907 | --- | --- | 11 |
| 12 | --- | --- | --- | 247.179 | 247.161 | 247.152 | 247.088 | 246.949A | 246.898 | 246.898 | --- | --- | 12 |
| 13 | --- | --- | --- | 247.178 | 247.132 | 247.173 | 247.051 | 246.949 | 246.898 | 246.900 | --- | --- | 13 |
| 14 | --- | --- | --- | 247.164 | 247.128 | 247.164 | 247.049 | 246.923A | 246.911 | 246.894 | --- | --- | 14 |
| 15 | --- | --- | --- | 247.141 | 247.122 | 247.186 | 247.043 | 246.925E | 246.898 | 246.877 | --- | --- | 15 |
| 16 | --- | --- | --- | 247.133 | 247.118 | 247.154 | 247.042 | 246.927A | 246.912 | 246.875 | --- | --- | 16 |
| 17 | --- | --- | --- | 247.138 | 247.110 | 247.139 | 247.043 | 246.937A | 246.914 | 246.886 | --- | --- | 17 |
| 18 | --- | --- | --- | 247.136 | 247.108 | 247.127 | 247.035 | 246.928A | 246.898 | 246.886 | --- | --- | 18 |
| 19 | --- | --- | --- | 247.128 | 247.088 | 247.148 | 247.030 | --- | 246.894 | 246.843 | --- | --- | 19 |
| 20 | --- | --- | --- | 247.132 | 247.077 | 247.114 | 247.031 | --- | 246.899 | 246.869 | --- | --- | 20 |
| 21 | --- | --- | --- | 247.133 | 247.098 | 247.105 | 247.028 | --- | 246.898 | 246.878 | --- | --- | 21 |
| 22 | --- | --- | --- | 247.137 | 247.084 | 247.105 | 247.020 | --- | 246.858 | 246.885 | --- | --- | 22 |
| 23 | --- | --- | --- | 247.137 | 247.110 | 247.105 | 247.006 | 246.927A | 246.886 | 246.881 | --- | --- | 23 |
| 24 | --- | --- | --- | 247.135 | 247.116 | 247.104 | 247.006 | 246.938A | 246.880 | 246.882 | --- | --- | 24 |
| 25 | --- | --- | --- | 247.138 | 247.088 | 247.108 | 246.988 | 246.927A | 246.858 | 246.883 | --- | --- | 25 |
| 26 | --- | --- | --- | 247.138 | 247.111 | 247.087 | 246.974 | 246.925E | 246.898 | 246.885A | --- | --- | 26 |
| 27 | --- | --- | --- | 247.138 | 247.113 | 247.103 | 246.991 | 246.924E | 246.887 | --- | --- | --- | 27 |
| 28 | --- | --- | --- | 247.133 | 247.128 | 247.117 | 246.991 | 246.922A | 246.886 | --- | --- | --- | 28 |
| 29 | --- | | --- | 247.134 | 247.111 | 247.095 | 246.983 | 246.768A | 246.890 | --- | --- | --- | 29 |
| 30 | --- | | --- | 247.135 | 247.103 | 247.094 | 246.987 | --- | 246.887 | --- | --- | --- | 30 |
| 31 | --- | | --- | | 247.107 | | 246.977 | --- | | --- | | --- | 31 |
| MEAN | --- | --- | --- | --- | 247.123 | 247.115 | 247.033 | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 247.180 | 247.182 | 247.104 | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 247.088 | 247.073 | 246.987 | --- | --- | --- | --- | --- | MIN |

WATER LEVELS IN METRES

### SUMMARY FOR THE YEAR 1988

MAXIMUM DAILY, 247.208 ON APR 7
MINIMUM DAILY, 246.768A ON AUG 28
MAXIMUM INSTANTANEOUS,
247.289 AT 18:09 CST ON JUN 12

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 02 30 N
LONG 96 36 31 W

A - MANUAL GAUGE

E - ESTIMATED

NATURAL FLOW

DRAINAGE AREA,
939 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1980 ADJ.)

## EAGER LAKE NEAR TOD LAKE - STATION NO. 06EB007

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 32.473 | 32.415 | 32.384 | 32.307 | 32.297 | 32.814 | 33.102 | 33.153 | 33.028 | 32.884 | 32.724 | 32.648 | 1 |
| 2 | 32.458 | 32.415 | 32.384 | 32.300 | 32.308 | 32.828 | 33.128 | 33.142 | 33.017 | 32.872 | 32.711 | 32.644 | 2 |
| 3 | 32.454 | 32.407 | 32.380 | 32.298 | 32.318 | 32.838 | 33.130 | 33.113 | 32.998 | 32.888 | 32.708 | 32.645 | 3 |
| 4 | 32.448 | 32.400 | 32.358 | 32.297 | 32.337 | 32.848 | 33.158 | 33.108 | 33.004 | 32.884 | 32.708 | 32.647 | 4 |
| 5 | 32.451 | 32.403 | 32.354 | 32.298 | 32.348 | 32.881 | 33.158 | 33.123 | 33.005 | 32.891 | 32.704 | 32.640 | 5 |
| 6 | 32.448 | 32.403 | 32.349 | 32.293 | 32.381 | 32.857 | 33.172 | 33.127 | 33.005 | 32.853 | 32.698 | 32.633 | 6 |
| 7 | 32.444 | 32.402 | 32.352 | 32.290 | 32.377 | 32.878 | 33.174 | 33.128 | 33.001 | 32.841 | 32.701 | 32.634 | 7 |
| 8 | 32.442 | 32.394 | 32.352 | 32.287 | 32.398 | 32.887 | 33.166 | 33.127 | 33.003 | 32.838 | 32.695 | 32.624 | 8 |
| 9 | 32.436 | 32.387 | 32.349 | 32.284 | 32.411 | 32.890 | 33.178 | 33.126 | 33.008 | 32.837 | 32.693 | 32.621 | 9 |
| 10 | 32.431 | 32.401 | 32.350 | 32.284 | 32.430 | 32.883 | 33.173 | 33.117 | 32.983 | 32.825 | 32.694 | 32.618 | 10 |
| 11 | 32.432 | 32.394 | 32.347 | 32.277 | 32.452 | 32.900 | 33.189 | 33.113 | 32.975 | 32.838 | 32.708 | 32.611 | 11 |
| 12 | 32.430 | 32.398 | 32.345 | 32.274 | 32.478 | 32.918 | 33.179 | 33.108 | 32.971 | 32.818 | 32.702 | 32.611 | 12 |
| 13 | 32.432 | 32.397 | 32.343 | 32.277 | 32.487 | 32.931 | 33.177 | 33.101 | 32.972 | 32.803 | 32.692 | 32.612 | 13 |
| 14 | 32.430 | 32.392 | 32.343 | 32.274 | 32.512 | 32.942 | 33.184 | 33.082 | 32.981 | 32.798 | 32.689 | 32.604 | 14 |
| 15 | 32.433 | 32.393 | 32.338 | 32.270 | 32.526 | 32.936 | 33.178 | 33.081 | 32.970 | 32.788 | 32.688 | 32.604 | 15 |
| 16 | 32.430 | 32.393 | 32.338 | 32.278 | 32.531 | 32.952 | 33.178 | 33.077 | 32.958 | 32.784 | 32.674 | 32.602 | 16 |
| 17 | 32.418 | 32.394 | 32.331 | 32.268 | 32.548 | 32.958 | 33.178 | 33.081 | 32.957 | 32.787 | 32.678 | 32.595 | 17 |
| 18 | 32.421 | 32.386 | 32.328 | 32.271 | 32.571 | 32.980 | 33.177 | 33.088 | 32.951 | 32.777 | 32.666 | 32.595 | 18 |
| 19 | 32.418 | 32.381 | 32.332 | 32.262 | 32.582 | 32.978 | 33.188 | 33.070 | 32.946 | 32.784 | 32.672 | 32.595A | 19 |
| 20 | 32.418 | 32.383 | 32.327 | 32.264 | 32.587 | 33.004 | 33.177 | 33.071 | 32.959 | 32.751 | 32.689 | --- | 20 |
| 21 | 32.430 | 32.374 | 32.323 | 32.248 | 32.618 | 33.021 | 33.185 | 33.070 | 32.943 | 32.756 | 32.687 | --- | 21 |
| 22 | 32.424 | 32.371 | 32.320 | 32.262 | 32.650 | 33.004 | 33.178 | 33.027 | 32.945 | 32.762 | 32.658 | --- | 22 |
| 23 | 32.418 | 32.371 | 32.321 | 32.266 | 32.666 | 33.012 | 33.208 | 33.021 | 32.923 | 32.760 | 32.657 | --- | 23 |
| 24 | 32.413 | 32.370 | 32.321 | 32.266 | 32.674 | 33.013 | 33.182 | 33.036 | 32.956 | 32.732 | 32.652 | --- | 24 |
| 25 | 32.418 | 32.372 | 32.318 | 32.291 | 32.698 | 33.023 | 33.189 | 33.048 | 32.928 | 32.741 | 32.648 | --- | 25 |
| 26 | 32.420 | 32.367 | 32.318 | 32.288 | 32.705 | 33.035 | 33.177 | 33.042 | 32.908 | 32.734 | 32.648 | --- | 26 |
| 27 | 32.420 | 32.388 | 32.318 | 32.286 | 32.722 | 33.040 | 33.183 | 33.038 | 32.922 | 32.722 | 32.645 | --- | 27 |
| 28 | 32.418 | 32.389 | 32.313 | 32.288 | 32.754 | 33.054 | 33.184 | 33.026 | 32.918 | 32.749 | 32.639 | --- | 28 |
| 29 | 32.418 | | 32.309 | 32.291 | 32.768 | 33.063 | 33.183 | 33.027 | 32.884 | 32.761 | 32.648 | --- | 29 |
| 30 | 32.418 | | 32.306 | 32.290 | 32.785 | 33.083 | 33.184 | 33.029 | 32.873 | 32.743 | 32.638 | --- | 30 |
| 31 | 32.417 | | 32.306 | | 32.811 | | 33.150 | 33.028 | | 32.734 | | --- | 31 |
| MEAN | 33.430 | 32.390 | 32.335 | 32.282 | 32.638 | 32.946 | 33.167 | 33.080 | 32.953 | 32.786 | 32.679 | --- | MEAN |
| MAX | 33.473 | 32.416 | 32.384 | 32.307 | 32.811 | 33.083 | 33.208 | 33.153 | 33.028 | 32.891 | 32.724 | --- | MAX |
| MIN | 32.413 | 32.367 | 32.306 | 32.248 | 32.297 | 32.814 | 33.102 | 33.021 | 32.873 | 32.732 | 32.638 | --- | MIN |

WATER LEVELS IN METRES

### SUMMARY FOR THE YEAR 1988

MAXIMUM DAILY, 33.208 ON JUL 33
MINIMUM DAILY, 32.248 ON APR 21
MAXIMUM INSTANTANEOUS,
33.291 AT 13:27 CST ON JUL 23

TYPE OF GAUGE - RECORDING
LOCATION - LAT 56 32 20 N
LONG 101 33 20 W

A - MANUAL GAUGE

REGULATED

DRAINAGE AREA,
1 500 km²

WATER LEVELS ARE REFERRED TO ASSUMED DATUM

## EAST FISHER RIVER NEAR HODGSON - STATION NO. 05SD004

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.0128 | 0.1038 | 0.241 | 0.136 | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | 0.0118 | 0.1388 | 0.187 | 0.131 | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | 0.0128 | 0.2408 | 0.158 | 0.107 | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | 0.0128 | 0.2818 | 0.184 | 0.095 | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | 0.0128 | 0.2638 | 0.164 | 0.102 | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | 0.0128 | 0.2608 | 0.161 | 0.092 | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | 0.0128 | 0.5008 | 0.150 | 0.121 | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | 0.0138 | 0.5408 | 0.152 | 0.150 | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | 0.0148 | 0.3318 | 0.150 | 0.138 | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | 0.0158 | 0.2748 | 0.158 | 0.184 | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | 0.0178 | 0.2308 | 0.150 | 0.200 | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | 0.0198 | 0.289 | 0.130 | 0.884 | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | 0.0208 | 0.332 | 0.104 | 4.65 A | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | 0.0228 | 0.420 | 0.100 | 5.55 A | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | 0.0258 | 0.4658 | 0.103 | 4.55 | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | 0.0268 | 0.4808 | 0.110 | 1.91 | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | 0.0258 | 0.570 | 0.113 | 1.03 | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | 0.0238 | 0.5328 | 0.192 | 0.741 | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | 0.0218 | 0.448 | 0.183 | 0.580 | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | 0.0208 | 0.450 | 0.220 | 0.507 | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | 0.0208 | 0.481 | 0.184 | 0.436 | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | 0.0218 | 0.733 | 0.126 | 0.396 | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | 0.0268 | 0.850 | 0.138 | 0.387 | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | 0.0258 | 0.858 | 0.122 | 0.368 | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | 0.0268 | 0.478 | 0.210 | 0.368 | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | 0.0368 | 0.388 | 0.382 | 0.388 | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | 0.1018 | 0.352 | 0.328 | 0.388 | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | 0.1058 | 0.301 | 0.257 | 0.410 | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | 0.0858 | 0.268 | 0.198 | 0.404 | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | 0.0828 | 0.286 | 0.132 | 0.396 | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | 0.0878 | | 0.141 | | --- | --- | | --- | --- | --- | 31 |
| TOTAL | --- | --- | 0.854 | 11.904 | 5.434 | 27.194 | --- | --- | --- | --- | --- | --- | TOTAL |
| MEAN | --- | --- | 0.031 | 0.397 | 0.175 | 0.906 | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | 0.105 | 0.850 | 0.382 | 5.55 | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | 0.011 | 0.103 | 0.100 | 0.092 | --- | --- | --- | --- | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO JUN

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.373
MAXIMUM DAILY, 5.55A ON JUN 14
MINIMUM DAILY, 0.011B ON MAR 2
MAXIMUM INSTANTANEOUS,
5.55 AT 05:32 CST ON JUN 14

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 13 00 N
LONG 97 32 00 W
DRAINAGE AREA, 390 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | --- |
| FEB | --- | AUG | --- |
| MAR | 82.4 | SEP | --- |
| APR | 1 030 | OCT | --- |
| MAY | 488 | NOV | --- |
| JUN | 2 350 | DEC | --- |

TOTAL DISCHARGE, 3 930 dam³

## EDWARDS CREEK DRAIN BELOW JACKFISH CREEK - STATION NO. 05LJ047

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0 B | 0.0238 | 0.088 | 0.081 | 0.082 | 0 | 0.138 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0 B | 0.1888 | 0.117 | 0.085 | 0.051 | 0.008 | 0.088 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0 B | 0.8108 | 0.118 | 0.041 | 0.044 | 0.018 | 0.080 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0 B | 0.8338 | 0.142 | 0.037 | 0.028 | 0 | 0.088 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0 B | 0.7838 | 0.197 | 0.044 | 0.018 | 0 | 0.083 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0 B | 0.5138 | 0.138 | 0.070 | 0.010 | 0 | 0.085 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0 B | 0.3308 | 0.146 | 0.408 | 0.001 | 0 | 0.084 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0 B | 0.1988 | 0.128 | 0.833 | 0.030 | 0 | 0.110 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0 B | 0.2088 | 0.118 | 0.383 | 0.158 | 0 | 0.087 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0 B | 0.2238 | 0.108 | 0.238 | 0.118 | 0 | 0.081 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0 B | 0.2388 | 0.077 | 0.208 | 0.078 | 0 | 0.048 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0 B | 0.2538 | 0.070 | 0.884 | 0.184 | 0.138 | 0.031 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0 B | 1.48 B | 0.058 | 14.8 | 0.331 | 0.321 | 0.026 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0 B | 0.8948 | 0.080 | 4.67 | 0.182 | 0.244 | 0.023 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0 B | 0.788 | 0.047 | 2.31 | 0.103 | 0.128 | 0.023 | 0.018 | --- | --- | 15 |
| 16 | --- | --- | 0 B | 0.882 | 0.078 | 1.18 | 0.068 | 0.083 | 0.023 | 0.027 | --- | --- | 16 |
| 17 | --- | --- | 0 B | 0.831A | 0.057 | 0.884 | 0.068 | 0.031 | 0.022 | 0.020 | --- | --- | 17 |
| 18 | --- | --- | 0 B | 0.898 | 0.082 | 0.939 | 0.047 | 0.027 | 0.021 | 0.025 | --- | --- | 18 |
| 19 | --- | --- | 0 B | 0.478 | 0.082 | 0.588 | 0.033 | 0.028 | 0.027 | 0.019 | --- | --- | 19 |
| 20 | --- | --- | 0.0108 | 0.518 | 0.085 | 0.348 | 0.022 | 0.022 | 0.033 | 0.022 | --- | --- | 20 |
| 21 | --- | --- | 0.0278 | 0.498 | 0.090 | 0.284 | 0.018 | 0.017 | 0.028 | 0.015 | --- | --- | 21 |
| 22 | --- | --- | 0.1108 | 0.800 | 0.085 | 0.223 | 0.010 | 0.083 | 0.032 | 0.015 | --- | --- | 22 |
| 23 | --- | --- | 0.2768 | 1.30 | 0.055 | 0.188 | 0.004 | 0.042 | 0.027 | 0.013 | --- | --- | 23 |
| 24 | --- | --- | 0.5348 | 0.880 | 0.053 | 0.201 | 0 | 0.031 | 0.019 | 0.004 | --- | --- | 24 |
| 25 | --- | --- | 0.8488 | 0.828 | 0.178 | 0.187 | 0 | 0.039 | 0.018 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0.8368 | 0.483 | 0.848 | 0.300 | 0 | 0.086 | 0.013 | 0.028 | --- | --- | 26 |
| 27 | --- | --- | 0.4158 | 0.344 | 0.418 | 0.171 | 0 | 0.048 | 0.008 | 0.004 | --- | --- | 27 |
| 28 | --- | --- | 0.2298 | 0.184 | 0.280 | 0.144 | 0 | 0.048 | 0 | 0.288 | --- | --- | 28 |
| 29 | --- | | 0.1808 | 0.123 | 0.180 | 0.142 | 0 | 0.488 | 0 | 0.251 | --- | --- | 29 |
| 30 | --- | | 0.0408 | 0.106 | 0.135 | 0.116 | 0 | 0.328 | 0 | 0.183 | --- | --- | 30 |
| 31 | --- | | 0.0058 | | 0.108 | | 0 | 0.188 | | 0.188A | | --- | 31 |
| TOTAL | --- | --- | 3.417 | 16.388 | 4.083 | 30.871 | 1.698 | 2.400 | 1.328 | 1.184 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.110 | 0.842 | 0.131 | 1.03 | 0.055 | 0.077 | 0.044 | 0.038 | --- | --- | MEAN |
| MAX | --- | --- | 0.848 | 1.48 | 0.848 | 14.8 | 0.331 | 0.488 | 0.138 | 0.288 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.023 | 0.047 | 0.037 | 0 | 0 | 0 | 0 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.248
MAXIMUM DAILY, 14.8 ON JUN 13
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
27.3 AT 07:48 CST ON JUN 13

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 05 30 N
LONG 99 55 20 W
DRAINAGE AREA, 311 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 147 |
| FEB | --- | AUG | 307 |
| MAR | 288 | SEP | 118 |
| APR | 1 400 | OCT | 101 |
| MAY | 381 | NOV | --- |
| JUN | 2 840 | DEC | --- |

TOTAL DISCHARGE, 5 280 dam³

## ELGIN CREEK NEAR SOURIS - STATION NO. 05NG012

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0.1048 | 0.081 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 8.70 B | 0.069 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 22.9 A | 0.081 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 21.3 | 0.047 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 18.8 | 0.039 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 10.2 | 0.030 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 5.65 | 0.022 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 3.89 | 0.018 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 2.15 | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 1.74 | 0.005 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 1.35 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 1.15 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 1.12 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 1.08 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 1.17 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.884 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.898 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.503 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.391 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.312 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.248 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.210 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.207 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.197 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.163 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.128 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.120 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.107 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.100 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.091 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 104.583 | 0.383 | 0 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 3.48 | 0.012 | 0 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 22.9 | 0.081 | 0 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.091 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.428
MAXIMUM DAILY, 22.9A ON APR 3
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
31.2 AT 20:20 CST ON APR 3

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 35 28 N
LONG 100 14 05 W
DRAINAGE AREA, 1 170 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 9 030 | OCT | 0 |
| MAY | 33 0 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, 9 060 dam³

## ELGIN RESERVOIR NEAR ELGIN - STATION NO. 05NG803

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 488.870 | 488.888 | 488.809 | 488.625 | 488.450 | 488.349 | 488.283E | --- | 1 |
| 2 | --- | --- | --- | --- | 488.871 | 488.883 | 488.802 | 488.617 | 488.453E | 488.343 | 488.281E | --- | 2 |
| 3 | --- | --- | --- | --- | 488.871 | 488.878 | 488.792 | 488.613 | 488.455E | 488.338 | 488.278 | --- | 3 |
| 4 | 488.293 | --- | --- | --- | 488.870 | 488.888 | 488.785 | 488.601 | 488.458E | 488.333 | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 488.868 | 488.895 | 488.778 | 488.588 | 488.480 | 488.331 | --- | --- | 5 |
| 6 | --- | --- | --- | --- | 488.867 | 488.886 | 488.771 | 488.578 | 488.445E | 488.326 | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 488.864 | 488.888 | 488.764 | 488.571 | 488.430 | 488.324 | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 488.867 | 488.887 | 488.778 | 488.565 | 488.429E | 488.322 | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 488.865 | 488.883 | 488.772 | 488.557 | 488.427E | 488.320 | --- | --- | 9 |
| 10 | --- | --- | --- | 487.107 | 488.862 | 488.857 | 488.767 | 488.547 | 488.428E | 488.319 | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 488.854 | 488.852 | 488.782 | 488.540 | 488.424E | 488.316 | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 488.848 | 488.851 | 488.758 | 488.534 | 488.423E | 488.313 | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 488.840 | 488.886 | 488.751 | 488.542 | 488.421E | 488.310 | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 488.838 | 488.885 | 488.745 | 488.548 | 488.420 | 488.311 | --- | --- | 14 |
| 15 | --- | --- | --- | --- | 488.833 | 488.882 | 488.737 | 488.540 | 488.417E | 488.310 | --- | --- | 15 |
| 16 | --- | --- | 488.302 | --- | 488.833 | 488.857 | 488.731 | 488.532 | 488.414E | 488.308 | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 488.841 | 488.858 | 488.722 | 488.532 | 488.411E | 488.307 | --- | --- | 17 |
| 18 | --- | --- | --- | 487.008 | 488.837 | 488.855 | 488.716 | 488.535 | 488.408E | 488.308 | --- | --- | 18 |
| 19 | --- | --- | --- | 487.008 | 488.838 | 488.850 | 488.714 | 488.531 | 488.408E | 488.308E | --- | --- | 19 |
| 20 | --- | --- | --- | 487.008 | 488.829 | 488.841 | 488.709 | 488.527 | 488.403E | 488.308 | --- | --- | 20 |
| 21 | --- | --- | --- | 487.003 | 488.821 | 488.838 | 488.700 | 488.528E | 488.400 | 488.308E | --- | --- | 21 |
| 22 | --- | --- | --- | 487.002 | 488.814 | 488.830 | 488.690 | 488.524E | 488.394E | 488.305E | --- | --- | 22 |
| 23 | --- | 488.354 | --- | 488.993 | 488.814E | 488.824 | 488.680 | 488.523E | 488.389E | 488.303E | --- | --- | 23 |
| 24 | --- | --- | --- | 488.987 | 488.814 | 488.820 | 488.674 | 488.521E | 488.383E | 488.301E | --- | --- | 24 |
| 25 | --- | --- | --- | 488.988 | 488.814 | 488.819 | 488.666 | 488.520 | 488.377 | 488.300E | --- | --- | 25 |
| 26 | --- | --- | --- | 488.989 | 488.813 | 488.808 | 488.655 | 488.510E | 488.373 | 488.288 | --- | --- | 26 |
| 27 | --- | --- | --- | 488.981 | 488.808 | 488.804 | 488.648 | 488.500E | 488.368 | 488.288E | --- | --- | 27 |
| 28 | --- | --- | --- | 488.974 | 488.805 | 488.802 | 488.640 | 488.490E | 488.360 | 488.283E | --- | --- | 28 |
| 29 | --- | | --- | 488.970 | 488.889 | 488.815 | 488.635 | 488.480E | 488.357 | 488.281E | --- | --- | 29 |
| 30 | --- | | --- | 488.895 | 488.814 | 488.830 | 488.630 | 488.470E | 488.354 | 488.288E | --- | --- | 30 |
| 31 | --- | | --- | 488.893 | | 488.829 | 488.480E | | | 488.286E | | --- | 31 |
| MEAN | --- | --- | --- | --- | 488.837 | 488.848 | 488.723 | 488.540 | 488.411 | 488.312 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 488.871 | 488.888 | 488.809 | 488.625 | 488.480 | 488.348 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 488.893 | 488.802 | 488.829 | 488.480 | 488.354 | 488.288 | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 28 30 N
LONG 100 14 13 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1968

DRAINAGE AREA,
878 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## ELM CREEK CHANNEL NEAR ELM CREEK - STATION NO. 05DC005

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.0808 B | 0 | 0.030 | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | 0B | 3.00 B | 0 | 0.089 | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | 0B | 1.66 B | 0 | 0.042 | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.4038 B | 0 | 0.024 | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.5478 B | 0 | 0.018 | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | 0B | 1.28 B | 0 | 0.004 | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | 0B | 1.34 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.8888 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.5508 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.3448 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.2188 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.168 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.107 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.075 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.038 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | 0B | 0.014 B | 0 | 0.012 | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | 0B | 0.009 B | 0 | 0.015 | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | --- | --- | | --- | | --- | 31 |
| TOTAL | --- | --- | 0 | 10.726 | 0 | 0.234 | --- | --- | --- | --- | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.358 | 0 | 0.008 | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | 0 | 3.00 | 0 | 0.089 | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.090
MAXIMUM DAILY, 3.00B ON APR 15
MINIMUM DAILY, 0B ON MAR 1

SUMMARY FOR THE MONTHS MAR TO JUN

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 48 42 N
LONG 97 58 57 W
DRAINAGE AREA, 637 km²

B - ICE CONDITIONS

REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | --- |
| FEB | --- | AUG | --- |
| MAR | 0 | SEP | --- |
| APR | 927 | OCT | --- |
| MAY | 0 | NOV | --- |
| JUN | 20.2 | DEC | --- |

TOTAL DISCHARGE, 947 dam³

REMARKS - PREVIOUS TO 1988 PUBLISHED UNDER THE NAME "ELM CREEK CHANNEL NO.0.00. 2 NEAR ELM CREEK"

## ELM CREEK CHANNEL NO. 3 NEAR ELM CREEK - STATION NO. 05DC006

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.003 | 0 E | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.001 | 0 E | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0 | 0 E | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 0.001 | 0 E | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 B | 0 | 0 E | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | 0B | 0 B | 0 | 0 E | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | 0B | 0 B | 0 | 0 E | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | 0B | 0 B | 0 | 0 E | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | 0B | 0 B | 0 | 0 E | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | 0B | 0 B | 0 | 0 E | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | 0B | 0 B | 0 | 0 E | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | 0B | 0 B | 0 | 0 A | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | 0B | 0 B | 0 | 0.008 | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.0808 | 0 | 0.024 | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | 0B | 2.18 B | 0 | 0.011 | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | 0B | 1.21 B | 0 | 0.003 | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.4788 | 0 | 0 | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.6948 | 0 | 0 | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.8508 | 0 | 0 | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.7788 | 0 | 0 | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.5018 | 0 | 0 | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.3218 | 0 | 0 | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.2118 | 0 E | 0 | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.1398 | 0 E | 0 | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.094 | 0 E | 0 | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.036 | 0 E | 0 | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.018 | 0 E | 0 | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.010 | 0 E | 0 | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | 0B | 0.007 | 0 E | 0 | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | 0B | 0.008 | 0 E | 0 | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | 0B | | 0 A | | --- | --- | | --- | | --- | 31 |
| TOTAL | --- | --- | 0 | 7.679 | 0.005 | 0.044 | --- | --- | --- | --- | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.256 | 0 | 0.001 | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | 0 | 2.18 | 0.003 | 0.024 | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.083
MAXIMUM DAILY, 2.18B ON APR 15
MINIMUM DAILY, 0B ON MAR 1

SUMMARY FOR THE MONTHS MAR TO JUN

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 47 54 N
LONG 98 00 30 W
DRAINAGE AREA, 420 km²

A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | --- |
| FEB | --- | AUG | --- |
| MAR | 0 | SEP | --- |
| APR | 883 | OCT | --- |
| MAY | 0.43 | NOV | --- |
| JUN | 3.80 | DEC | --- |

TOTAL DISCHARGE, 887 dam³

## SPINETTE CREEK NEAR CARBERRY - STATION NO. 05MH007

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0.007 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0.0028 | 0.006 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0.0058 | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0.0018 | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.0038 | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.0038 | 0.007 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.0038 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.0038 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.0038 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.0058 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.0108 | 0 | 0.006 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.0118 | 0 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.0138 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.0188 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.0118 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.0128 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.0158 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.0188 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.0318 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.037 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.041 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.058 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.063 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.087 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.068 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.061 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.033 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.016 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 0.883 | 0.085 | 0.009 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.030 | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.085 | 0.008 | 0.006 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.003
MAXIMUM DAILY, 0.085 ON APR 27
MINIMUM DAILY, 0B ON MAR 1

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 44 25 N
LONG 99 15 50 W
DRAINAGE AREA, 403 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 51.2 | OCT | 0 |
| MAY | 5.62 | NOV | --- |
| JUN | 0.78 | DEC | --- |

TOTAL DISCHARGE, 57.6 dam³

## FAIRFORD RIVER NEAR FAIRFORD - STATION NO. 05LM001

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.8B | 15.4B | 17.0 | 16.0 | 15.8 | 15.8 A | 38.1 | 27.2 | 23.1 | 8.89 | 24.8 | 35.2 | 1 |
| 2 | 13.8B | 15.3B | 17.3 | 16.2 | 15.3 | 15.5 E | 39.2 | 28.7 | 23.8 | 12.6 | 26.3 | 35.2B | 2 |
| 3 | 13.4B | 15.4B | 17.4 | 16.1 | 15.8 | 17.2 A | 38.7 | 29.2 | 25.2 | 16.5 | 42.3 | 35.2E | 3 |
| 4 | 13.3B | 15.3B | 17.3 | 15.7 | 15.8 | 15.7 | 35.5 | 30.6 | 25.7 | 17.5 | 33.4 | 35.1E | 4 |
| 5 | 13.4B | 15.3B | 16.9 | 17.4 | 15.8 | 15.2 | 30.9 | 20.4 | 25.1 | 15.8 | 30.2 | 35.1B | 5 |
| 6 | 13.8B | 15.3B | 16.5 | 16.1 | 15.8 | 15.8 | 30.6 | 22.5 | 24.1 | 13.7 | 34.4 | 35.1B | 6 |
| 7 | 13.8B | 15.6B | 16.5 | 15.5 | 15.8 | 13.3 | 33.8 | 23.5 | 27.4 | 15.5 | 33.3 | 35.3B | 7 |
| 8 | 14.2B | 15.1B | 15.3 | 15.3 | 15.8 | 15.2 | 32.6 | 23.9 | 25.8 | 16.8 | 29.7 | 34.0B | 8 |
| 9 | 14.1B | 15.8B | 15.0 | 15.2 | 15.4 | 17.8 | 31.5 | 25.4 | 20.8 | 18.5 | 31.8 | 34.7B | 9 |
| 10 | 14.1B | 15.8B | 15.9 | 15.2 | 15.1 | 15.6 | 28.9 | 25.0 | 20.8 | 17.5 | 36.9 | 34.2B | 10 |
| 11 | 14.8B | 15.8B | 15.7 | 15.3 | 15.0 | 17.5 | 28.5 | 25.2 | 18.5 | 17.7 | 30.3 | 34.7B | 11 |
| 12 | 15.6B | 15.8B | 15.8 | 15.4 | 15.0 | 9.83 | 28.6 | 25.1 | 21.9 | 17.1 | 32.9 | 34.6B | 12 |
| 13 | 15.4B | 16.7B | 15.4 | 15.6 | 15.9 | 12.5 | 30.5 | 20.8 | 23.5 | 15.4 | 32.2 | 35.2B | 13 |
| 14 | 15.5B | 15.6 | 16.0 | 15.8 | 15.8 | 17.8 | 31.0 | 23.3 | 21.8 | 14.5 | 34.7 | 35.6B | 14 |
| 15 | 16.0B | 15.8B | 15.1 | 15.9 | 16.3 | 20.3 | 31.2 | 24.1 | 22.4 | 12.1 | 40.5 | 35.7B | 15 |
| 16 | 16.1 | 15.9B | 16.1 | 15.5 | 16.1 | 23.6 | 32.4 | 24.9 | 21.5 | 14.5 | 40.5 | 35.7B | 16 |
| 17 | 15.9 | 17.1B | 16.2 | 15.3 | 16.0 | 24.6 | 32.5 | 26.4 | 23.5 | 14.4 | 38.7 | 35.7B | 17 |
| 18 | 15.5 | 17.2B | 16.1 | 15.4 | 17.8 | 25.0 | 31.5 | 28.5 | 17.8 | 15.4 | 38.7 | 35.7B | 18 |
| 19 | 15.6 | 17.1B | 16.2 | 15.2 | 17.5 | 24.0 | 31.9 | 21.6 | 20.7 | 22.1 | 38.4 | 35.5B | 19 |
| 20 | 15.5 | 17.0B | 16.0 | 15.0 | 18.1 | 26.1 | 33.9 | 22.6 | 21.1 | 17.3 | 34.4 | 35.2B | 20 |
| 21 | 15.5 | 15.9B | 15.9 | 14.9A | 18.3 | 24.1 | 33.8 | 25.7 | 21.5 | 19.0 | 34.3 | 35.0B | 21 |
| 22 | 15.6 | 16.9B | 15.6 | 15.1E | 18.4 | 21.3 | 37.3 | 24.2 | 14.9 | 17.9 | 36.6 | 34.6B | 22 |
| 23 | 15.4 | 17.1B | 15.6 | 15.2A | 18.1 | 21.0 | 36.5 | 25.9 | 22.3 | 17.4 | 40.6 | 34.6B | 23 |
| 24 | 15.5 | 17.2B | 15.7 | 15.1 | 17.9 | 21.5 | 34.3 | 30.1 | 20.1 | 18.4 | 37.5 | 34.4B | 24 |
| 25 | 15.5 | 16.8B | 15.7 | 15.5 | 18.1 | 22.9 | 33.9A | 31.5 | 18.7 | 17.5 | 37.4 | 34.2B | 25 |
| 26 | 15.7 | 15.7 | 15.7 | 15.1 | 22.7 | 23.5 | 29.0 | 33.3 | 21.3 | 14.5 | 36.5 | 34.0B | 26 |
| 27 | 15.7 | 15.7 | 15.4 | 15.5 | 24.5 | 22.3 | 25.5 | 29.0 | 22.2 | 17.5 | 36.4 | 33.9B | 27 |
| 28 | 15.7 | 15.5 | 15.3 | 17.7 | 24.1 | 46.2 | 28.1 | 25.0 | 18.7 | 20.1 | 36.5 | 33.7B | 28 |
| 29 | 15.5 | | 15.4 | 18.2 | 22.5 | 48.3 | 28.0 | 22.4 | 18.7 | 18.4 | 36.5 | 33.8B | 29 |
| 30 | 15.4 | | 15.5 | 16.5 | 21.7 | 38.1 | 28.1 | 25.1 | 18.7 | 15.5 | 35.3 | 33.5B | 30 |
| 31 | 15.3B | | 15.7 | | 20.7 | | 27.7 | 22.8 | | 20.7 | | 33.3B | 31 |
| TOTAL | 484.0 | 481.0 | 496.5 | 477.4 | 508.2 | 555.93 | 984.1 | 787.4 | 650.5 | 514.89 | 1 052.0 | 1 079.5 | TOTAL |
| MEAN | 15.0 | 15.5 | 16.1 | 15.9 | 16.6 | 21.5 | 32.1 | 25.7 | 21.7 | 16.6 | 35.1 | 34.6 | MEAN |
| MAX | 16.1 | 17.2 | 17.4 | 18.5 | 24.5 | 48.3 | 39.2 | 33.3 | 27.4 | 22.1 | 42.3 | 35.3 | MAX |
| MIN | 13.3 | 15.3 | 15.3 | 14.9 | 15.1 | 9.83 | 25.5 | 20.4 | 14.5 | 8.89 | 24.8 | 33.3 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 22.5
MAXIMUM DAILY, 48.3 ON JUN 29
MINIMUM DAILY, 9.83 ON JUN 13
MAXIMUM INSTANTANEOUS,
37.4 AT 08:28 CST ON JUN 28

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 35 00 N
LONG 98 42 15 W
DRAINAGE AREA, 79 800 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
REGULATED SINCE 1934

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 48 100 | JUL | 98 900 |
| FEB | 38 600 | AUG | 68 900 |
| MAR | 49 100 | SEP | 58 200 |
| APR | 41 200 | OCT | 64 500 |
| MAY | 52 600 | NOV | 90 900 |
| JUN | 55 700 | DEC | 93 300 |

TOTAL DISCHARGE, 713 000 dam³

## FALCON LAKE NEAR FALCON LAKE - STATION NO. 05PD001

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 324.884 | 324.888E | 325.082 | 324.985 | 325.068 | 324.818E | 324.884 | --- | 1 |
| 2 | --- | --- | --- | --- | 324.817 | 324.870E | 325.053E | 325.005 | 325.050E | 324.815 | 324.884E | --- | 2 |
| 3 | --- | --- | --- | --- | 324.864 | 324.873 | 325.043E | 325.045 | 326.048 | 324.805 | 324.884E | --- | 3 |
| 4 | --- | --- | --- | --- | 324.851E | 324.873E | 325.034 | 325.040E | 325.038 | 324.795 | 324.884E | --- | 4 |
| 5 | --- | --- | --- | --- | 324.857E | 324.873 | 325.042 | 325.035 | 325.028 | 324.785 | 324.884E | --- | 5 |
| 6 | --- | --- | --- | --- | 324.884 | 324.883E | 325.057E | 325.035 | 325.025 | 324.775 | 324.884 | --- | 6 |
| 7 | --- | --- | --- | --- | 324.884E | 324.893 | 325.072 | 325.032E | 325.015 | 324.765 | --- | --- | 7 |
| 8 | --- | --- | 324.889 | --- | 324.884 | 324.913 | 325.088E | 325.028E | 325.005 | 324.765 | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 324.840 | 324.923E | 325.089E | 325.025 | 325.000E | 324.755 | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 324.884 | 324.933E | 325.083 | 325.015 | 324.985 | 324.755 | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 324.884E | 324.943E | 325.083 | 325.015 | 324.985 | 324.755 | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 324.884 | 324.953 | 325.053E | 325.005E | 324.980E | 324.745 | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 324.851E | 324.963 | 325.053E | 325.003E | 324.975 | 324.745 | 324.884 | --- | 13 |
| 14 | --- | --- | --- | --- | 324.847E | 325.018E | 325.053 | 324.998 | 324.965 | 324.741E | 324.884E | --- | 14 |
| 15 | --- | --- | --- | --- | 324.844 | 325.043 | 325.058E | 324.991E | 324.955 | 324.738E | 324.884E | --- | 15 |
| 16 | --- | --- | --- | --- | 324.834 | 325.043 | 325.048E | 324.988 | 324.945 | 324.734 | 324.884 | --- | 16 |
| 17 | --- | --- | --- | 324.886 | 324.839E | 325.043E | 325.043 | 324.984 | 324.935 | 324.734E | --- | --- | 17 |
| 18 | --- | --- | --- | --- | 324.844 | 325.043E | 325.043E | 324.979 | 324.925 | 324.734 | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 324.844E | 325.043 | 325.043 | 325.033E | 324.920E | 324.728E | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 324.844E | 325.043E | 325.034 | 325.088E | 324.915 | 324.724 | --- | --- | 20 |
| 21 | --- | --- | --- | --- | 324.844 | 325.043 | 325.027E | 325.118 | 324.905 | 324.722E | --- | --- | 21 |
| 22 | --- | --- | --- | --- | 324.848E | 325.043 | 325.021E | 325.111E | 324.895 | 324.721E | --- | --- | 22 |
| 23 | --- | --- | --- | --- | 324.854 | 325.042 | 325.014 | 325.105 | 324.885 | 324.719 | --- | --- | 23 |
| 24 | --- | --- | --- | --- | 324.858E | 325.037E | 325.004 | 325.108E | 324.875 | 324.715E | --- | --- | 24 |
| 25 | --- | --- | --- | 324.767 | 324.864 | 325.032 | 324.994 | 325.106 | 324.865 | 324.712E | --- | --- | 25 |
| 26 | --- | --- | --- | 324.773E | 324.884 | 325.037E | 324.994 | 325.101E | 324.855 | 324.708E | --- | --- | 26 |
| 27 | --- | --- | --- | 324.789E | 324.884E | 325.042 | 324.988E | 325.096 | 324.845 | 324.704 | --- | --- | 27 |
| 28 | --- | --- | --- | 324.805E | 324.883E | 325.038E | 324.984 | 325.085 | 324.835 | 324.702E | --- | --- | 28 |
| 29 | --- | --- | --- | 324.822E | 324.883 | 325.034 | 324.967E | 325.081E | 324.825 | 324.698E | --- | --- | 29 |
| 30 | --- | --- | --- | 324.838E | 324.883 | 325.048E | 324.990E | 325.076 | 324.822E | 324.697E | --- | --- | 30 |
| 31 | --- | | --- | | 324.883 | | 324.992E | 325.071E | | 324.694 | | --- | 31 |
| MEAN | --- | --- | --- | --- | 324.852 | 324.982 | 325.033 | 325.044 | 324.945 | 324.742 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 324.884 | 325.048 | 325.072 | 325.118 | 325.068 | 324.818 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 324.817 | 324.888 | 324.984 | 324.978 | 324.822 | 324.694 | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MAXIMUM DAILY, 325.118 ON AUG 21

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 40 45 N
LONG 95 10 45 W

DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1983

DRAINAGE AREA,
113 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1983 ADJ.)

## FAMILY LAKE AT LITTLE GRAND RAPIDS - STATION NO. 05RD008

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 303.872 | 303.924 | 303.906 | 303.838 | 303.815 | 303.987 | 304.648 | 304.657 | 304.487 | 304.277 | 304.148 | 304.090 | 1 |
| 2 | 303.875 | 303.924 | 303.906 | 303.838 | 303.819 | 303.988 | 304.658 | 304.680 | 304.481 | 304.279 | 304.144 | 304.087 | 2 |
| 3 | 303.878 | 303.924 | 303.903 | 303.836 | 303.819 | 304.008 | 304.680 | 304.682 | 304.477 | 304.289 | 304.149 | 304.087 | 3 |
| 4 | 303.881 | 303.926 | 303.901 | 303.832 | 303.823 | 304.017 | 304.666 | 304.678 | 304.473 | 304.287 | 304.148 | 304.087 | 4 |
| 5 | 303.883 | 303.923 | 303.897 | 303.830 | 303.815 | 304.036 | 304.673 | 304.691 | 304.466 | 304.285 | 304.141 | 304.082 | 5 |
| 6 | 303.887 | 303.924 | 303.894 | 303.828 | 303.830 | 304.048 | 304.671 | 304.668 | 304.458 | 304.270 | 304.140 | 304.078 | 6 |
| 7 | 303.888 | 303.924 | 303.894 | 303.826 | 303.835 | 304.049 | 304.680 | 304.648 | 304.458 | 304.273 | 304.142 | 304.076 | 7 |
| 8 | 303.887 | 303.924 | 303.893 | 303.823 | 303.834 | 304.058 | 304.688 | 304.642 | 304.453 | 304.277 | 304.137 | 304.076 | 8 |
| 9 | 303.890 | 303.925 | 303.885 | 303.822 | 303.837 | 304.068 | 304.692 | 304.638 | 304.453 | 304.270 | 304.137 | 304.071 | 9 |
| 10 | 303.892 | 303.927 | 303.883 | 303.821 | 303.842 | 304.108 | 304.690 | 304.633 | 304.451 | 304.264 | 304.142 | 304.071 | 10 |
| 11 | 303.886 | 303.926 | 303.878 | 303.818 | 303.848 | 304.124 | 304.688 | 304.626 | 304.446 | 304.261 | 304.138 | 304.067 | 11 |
| 12 | 303.891 | 303.928 | 303.871 | 303.817 | 303.848 | 304.146 | 304.688 | 304.620 | 304.439 | 304.261 | 304.140 | 304.064 | 12 |
| 13 | 303.904 | 303.923 | 303.876 | 303.815 | 303.848 | 304.183 | 304.688 | 304.605 | 304.434 | 304.240 | 304.138 | 304.060 | 13 |
| 14 | 303.907 | 303.923 | 303.871 | 303.813 | 303.846 | 304.220 | 304.680 | 304.595 | 304.418 | 304.234 | 304.134 | 304.058 | 14 |
| 15 | 303.911 | 303.930 | 303.867 | 303.812 | 303.850 | 304.247 | 304.691 | 304.592 | 304.418 | 304.224 | 304.129 | 304.054 | 15 |
| 16 | 303.913 | 303.918 | 303.867 | 303.811 | 303.868 | 304.278 | 304.685 | 304.584 | 304.401 | 304.222 | 304.128 | 304.054 | 16 |
| 17 | 303.914 | 303.916 | 303.862 | 303.810 | 303.873 | 304.302 | 304.700 | 304.582 | 304.402 | 304.217 | 304.124 | 304.052 | 17 |
| 18 | 303.918 | 303.916 | 303.861 | 303.808 | 303.880 | 304.332 | 304.697 | 304.573 | 304.392 | 304.218 | 304.121 | 304.051 | 18 |
| 19 | 303.918 | 303.917 | 303.858 | 303.804 | 303.878 | 304.368 | 304.698 | 304.573 | 304.378 | 304.227 | 304.120 | 304.048 | 19 |
| 20 | 303.918 | 303.914 | 303.857 | 303.802 | 303.892 | 304.387 | 304.697 | 304.581 | 304.378 | 304.204 | 304.118 | 304.048 | 20 |
| 21 | 303.920 | 303.912 | 303.855 | 303.802 | 303.884 | 304.411 | 304.684 | 304.584 | 304.378 | 304.202 | 304.113 | 304.044 | 21 |
| 22 | 303.921 | 303.910 | 303.858 | 303.804 | 303.868 | 304.439 | 304.688 | 304.588 | 304.339 | 304.184 | 304.111 | 304.042 | 22 |
| 23 | 303.922 | 303.910 | 303.853 | 303.808 | 303.883 | 304.451 | 304.681 | 304.548 | 304.350 | 304.187 | 304.107 | 304.040 | 23 |
| 24 | 303.922 | 303.908 | 303.853 | 303.812 | 303.880 | 304.467 | 304.685 | 304.546 | 304.354 | 304.182 | 304.104 | 304.041 | 24 |
| 25 | 303.922 | 303.910 | 303.848 | 303.814 | 303.888 | 304.508 | 304.684 | 304.548 | 304.327 | 304.183 | 304.103 | 304.040 | 25 |
| 26 | 303.926 | 303.908 | 303.848 | 303.813 | 303.930 | 304.534 | 304.672 | 304.543 | 304.330 | 304.170 | 304.102 | 304.040 | 26 |
| 27 | 303.924 | 303.908 | 303.842 | 303.814 | 303.886 | 304.572 | 304.653 | 304.528 | 304.338 | 304.168 | 304.101 | 304.039 | 27 |
| 28 | 303.926 | 303.906 | 303.838 | 303.818 | 303.971 | 304.598 | 304.668 | 304.512 | 304.316 | 304.167 | 304.098 | 304.035 | 28 |
| 29 | 303.923 | | 303.838 | 303.814 | 303.971 | 304.611 | 304.668 | 304.501 | 304.311 | 304.175 | 304.095 | 304.035 | 29 |
| 30 | 303.923 | | 303.843 | 303.818 | 303.980 | 304.638 | 304.681 | 304.498 | 304.308 | 304.185 | 304.092 | 304.032 | 30 |
| 31 | 303.922 | | 303.842 | | 303.988 | | 304.680 | 304.494 | | 304.188 | | 304.031 | 31 |
| MEAN | 303.896 | 303.919 | 303.868 | 303.817 | 303.875 | 304.278 | 304.680 | 304.580 | 304.404 | 304.228 | 304.128 | 304.057 | MEAN |
| MAX | 303.926 | 303.927 | 303.906 | 303.838 | 303.988 | 304.638 | 304.700 | 304.682 | 304.487 | 304.289 | 304.149 | 304.090 | MAX |
| MIN | 303.872 | 303.906 | 303.838 | 303.802 | 303.815 | 303.987 | 304.648 | 304.494 | 304.308 | 304.188 | 304.092 | 304.031 | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MEAN, 304.167
MAXIMUM DAILY, 304.700 ON JUL 17
MINIMUM DAILY, 303.202 ON APR 20
MAXIMUM INSTANTANEOUS,
304.705 AT 16:25 CST ON JUL 17

TYPE OF GAUGE - RECORDING
LOCATION - LAT 53 03 30 N
LONG 95 27 30 W

NATURAL FLOW

DRAINAGE AREA,
17 600 km²

WATER LEVELS ARE REFERRED TO ASSUMED DATUM

## FISH LAKE AT OUTLET CONTROL STRUCTURE - STATION NO. 05SB003

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 388.038E | 388.028 | 388.184 | 388.178 | 388.781 | 388.889 | 388.883 | 388.818 | --- | --- | 1 |
| 2 | --- | --- | 388.038E | 388.044 | 388.183 | 388.188 | 388.781 | 388.887 | 388.847 | 388.817 | --- | --- | 2 |
| 3 | --- | --- | 388.038E | 388.064 | 388.181 | 388.191 | 388.772 | 388.884 | 388.844 | 388.813 | --- | --- | 3 |
| 4 | --- | --- | 388.038E | 388.072 | 388.182 | 388.183 | 388.784 | 388.888 | 388.888 | 388.813 | --- | --- | 4 |
| 5 | --- | --- | 388.038E | 388.078 | 388.184 | 388.188 | 388.783 | 388.883 | 388.888 | 388.821 | --- | --- | 5 |
| 6 | --- | --- | 388.038E | 388.088 | 388.188 | 388.188 | 388.777 | 388.887 | 388.881 | 388.823 | --- | --- | 6 |
| 7 | --- | --- | 388.038E | 388.183 | 388.188 | 388.191 | 388.772 | 388.882 | 388.878 | 388.818 | --- | --- | 7 |
| 8 | --- | --- | 388.038A | 388.184 | 388.188 | 388.188 | 388.787 | 388.888 | 388.878 | 388.818 | --- | --- | 8 |
| 9 | --- | --- | 388.034 | 388.188 | 388.181 | 388.183 | 388.787 | 388.883 | 388.873 | 388.818 | --- | --- | 9 |
| 10 | --- | --- | 388.038 | 388.188 | 388.178 | 388.188 | 388.788 | 388.888 | 388.888 | 388.818 | --- | --- | 10 |
| 11 | --- | --- | 388.041 | 388.188 | 388.187 | 388.188 | 388.788 | 388.831 | 388.883 | 388.818 | --- | --- | 11 |
| 12 | --- | --- | 388.041 | 388.184 | 388.188 | 388.847 | 388.788 | 388.828 | 388.881 | 388.814 | --- | --- | 12 |
| 13 | --- | --- | 388.043 | 388.173 | 388.183 | 388.888 | 388.788 | 388.818 | 388.888 | 388.808 | --- | --- | 13 |
| 14 | --- | --- | 388.043 | 388.188 | 388.188 | 388.888 | 388.782 | 388.814 | 388.887 | 388.883 | --- | --- | 14 |
| 15 | --- | --- | 388.048 | 388.184 | 388.148 | 388.883 | 388.738 | 388.887 | 388.888 | 388.818 | --- | --- | 15 |
| 16 | --- | --- | 388.028 | 388.147 | 388.128 | 388.888 | 388.737 | 388.883 | 388.888 | 388.818 | --- | --- | 16 |
| 17 | --- | --- | 388.028 | 388.188 | 388.134 | 388.833 | 388.718 | 388.887 | 388.847 | 388.818 | --- | --- | 17 |
| 18 | --- | --- | 388.027 | 388.188 | 388.148 | 388.878 | 388.718 | 388.887 | 388.844 | 388.808 | --- | --- | 18 |
| 19 | --- | --- | 388.038 | 388.188 | 388.148 | 388.822 | 388.713 | 388.888 | 388.843 | 388.808 | --- | --- | 19 |
| 20 | --- | --- | 388.038 | 388.183 | 388.188 | 388.888 | 388.708 | 388.888 | 388.848 | 388.808 | --- | --- | 20 |
| 21 | --- | --- | 388.032 | 388.388 | 388.181 | 388.888 | 388.788 | 388.888 | 388.828 | 388.808 | --- | --- | 21 |
| 22 | --- | --- | 388.028 | 388.388 | 388.148 | 388.888 | 388.881 | 388.888 | 388.848 | 388.818 | --- | --- | 22 |
| 23 | --- | --- | 388.028 | 388.387 | 388.148 | 388.788 | 388.888 | 388.888 | 388.834 | 388.808 | --- | --- | 23 |
| 24 | --- | --- | 388.038 | 388.318 | 388.138 | 388.721 | 388.878 | 388.883 | 388.833 | 388.808 | --- | --- | 24 |
| 25 | --- | --- | 388.038 | 388.313 | 388.183 | 388.728 | 388.873 | 388.878 | 388.833 | 388.808 | --- | --- | 25 |
| 26 | --- | --- | 388.031 | 388.388 | 388.188 | 388.788 | 388.888 | 388.873 | 388.838 | 388.808 | --- | --- | 26 |
| 27 | --- | --- | 388.031 | 388.388 | 388.187 | 388.771 | 388.888 | 388.887 | 388.837 | 388.818 | --- | --- | 27 |
| 28 | --- | --- | 388.033 | 388.183 | 388.188 | 388.775 | 388.848 | 388.881 | 388.888 | 388.813 | --- | --- | 28 |
| 29 | --- | --- | 388.034 | 388.388 | 388.188 | 388.784 | 388.848 | 388.886 | 388.838 | 388.818 | --- | --- | 29 |
| 30 | --- | --- | 388.037 | 388.188 | 388.184 | 388.788 | 388.881 | 388.883 | 388.838 | 388.808A | --- | --- | 30 |
| 31 | --- | | 388.038 | | 388.178 | | 388.888 | 388.887 | | 388.808E | | --- | 31 |
| MEAN | --- | --- | 388.038 | 388.184 | 388.178 | 388.484 | 388.788 | 388.818 | 388.848 | 388.811 | --- | --- | MEAN |
| MAX | --- | --- | 388.043 | 388.313 | 388.188 | 388.788 | 388.788 | 388.888 | 388.878 | 388.823 | --- | --- | MAX |
| MIN | --- | --- | 388.028 | 388.028 | 388.134 | 388.183 | 388.848 | 388.887 | 388.828 | 388.803 | --- | --- | MIN |

WATER LEVELS IN METRES

### SUMMARY FOR THE YEAR 1988

MAXIMUM DAILY, 388.788 ON JUN 30
MINIMUM DAILY, 388.028 ON MAR 24
MAXIMUM INSTANTANEOUS,
388.792 AT 18:34 CST ON JUN 30

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 44 48 N
LONG 97 18 08 W

A - MANUAL GAUGE
E - ESTIMATED
REGULATED SINCE 1988
DRAINAGE AREA,
193 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1984 ADJ.)

## FISH LAKE DRAIN NEAR CAMP MORTON - STATION NO. 05SB008

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0E | 0 E | 0 | 0 | 0.004 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0E | 0 E | 0 | 0 A | 0.003 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0E | 0.0028 | 0 | 0 | 0.001 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0E | 0.0218 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0E | 0.0428 | 0 | 0 | 0.018 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0E | 0.1808 | 0 A | 0 | 0.008 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0E | 0.0188 | 0 A | 0 | 0.008 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0E | 0.0428 | 0 | 0 | 0.003 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0E | 0.013 | 0 | 0 | 0.003 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0E | 0.0188 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0E | 0.0188 | 0 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0E | 0.0218 | 0 | 2.48 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0E | 0.007A | 0 | 0.81 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0E | 0.378 | 0 | 1.84 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0E | 0.348 | 0 | 0.872 | 0 A | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0E | 0.384 | 0 | 0.848 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0E | 0.388 | 0 | 0.428A | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0E | 0.384 | 0 | 0.372 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0E | 0.183 | 0 | 0.138 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0E | 0.331 | 0 | 0.081 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0E | 0.384 | 0 | 0.031 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0E | 0.178 | 0 | 0.018 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0E | 0.181 | 0 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0E | 0.048 | 0 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0E | 0.018 | 0.001A | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0E | 0.007 | 0.003 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0E | 0.003 | 0 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0E | 0.003 | 0 | 0.014 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0E | 0 | 0 | 0.014 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0E | 0 | 0 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0E | | 0 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 3.043 | 0.003 | 13.448 | 0.043 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.101 | 0 | 0.418 | 0.001 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.388 | 0.003 | 2.81 | 0.018 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.068
MAXIMUM DAILY, 2.81 ON JUN 13
MINIMUM DAILY, 0E ON MAR 1
MAXIMUM INSTANTANEOUS,
11.1 AT 03:06 CST ON JUN 13

### SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 42 11 N
LONG 97 01 03 W
DRAINAGE AREA, 240 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
REGULATED SINCE 1988

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 3.73 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 263 | OCT | 0 |
| MAY | 0.38 | NOV | --- |
| JUN | 1 980 | DEC | --- |

TOTAL DISCHARGE, 1 390 dam³

## FISHER RIVER NEAR DALLAS - STATION NO. 05BD003

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.101 | 0.081 | 0.081 | 0.132 | 0.347 | 0.212 | 0.323E | 0.171 | 0.121 | 0.100 | 0.175 | 0.157 | 1 |
| 2 | 0.106 | 0.082 | 0.058 | 0.171 | 0.302 | 0.188 | 0.333E | 0.176 | 0.110 | 0.108 | 0.181 | 0.148 | 2 |
| 3 | 0.105 | 0.082 | 0.080 | 0.233 | 0.288 | 0.144 | 0.329E | 0.179 | 0.120 | 0.112 | 0.215 | 0.143 | 3 |
| 4 | 0.105 | 0.086 | 0.044 | 0.317 | 0.241 | 0.136 | 0.326E | 0.176 | 0.123 | 0.116 | 0.244 | 0.148 | 4 |
| 5 | 0.102 | 0.082 | 0.044 | 0.488 | 0.230 | 0.123 | 0.323E | 0.181 | 0.118 | 0.118 | 0.247 | 0.151 | 5 |
| 6 | 0.101 | 0.083 | 0.041 | 0.643 | 0.238 | 0.123 | 0.280E | 0.173 | 0.137 | 0.122 | 0.232 | 0.148 | 6 |
| 7 | 0.098 | 0.078 | 0.041 | 0.723 | 0.205 | 0.114 | 0.287E | 0.184 | 0.177 | 0.128 | 0.224 | 0.137 | 7 |
| 8 | 0.098 | 0.080 | 0.047 | 1.01 | 0.203 | 0.114 | 0.289E | 0.202A | 0.183 | 0.145 | 0.238 | 0.133 | 8 |
| 9 | 0.098 | 0.079 | 0.048 | 1.01 | 0.200 | 0.138 | 0.333E | 0.203E | 0.245 | 0.144 | 0.234 | 0.126 | 9 |
| 10 | 0.095 | 0.078 | 0.050 | 0.787 | 0.187 | 0.142 | 0.349E | 0.203E | 0.250 | 0.148 | 0.228 | 0.118 | 10 |
| 11 | 0.093 | 0.078 | 0.056 | 0.684 | 0.185 | 0.138 | 0.338E | 0.193E | 0.217 | 0.143 | 0.213 | 0.113 | 11 |
| 12 | 0.096 | 0.078 | 0.061 | 0.588 | 0.170 | 0.489 | 0.338E | 0.170E | 0.183 | 0.134 | 0.203 | 0.102 | 12 |
| 13 | 0.097 | 0.077 | 0.065 | 0.528 | 0.151 | 2.85 | 0.443E | 0.147E | 0.162 | 0.131 | 0.207 | 0.096 | 13 |
| 14 | 0.098 | 0.078 | 0.070 | 0.738 | 0.141 | 7.77 | 0.480E | 0.122E | 0.141 | 0.133 | 0.200 | 0.086 | 14 |
| 15 | 0.101 | 0.080 | 0.072 | 0.848 | 0.133 | 7.30 | 0.458E | 0.111E | 0.127 | 0.138 | 0.209 | 0.081 | 15 |
| 16 | 0.099 | 0.087 | 0.073 | 1.05 | 0.138 | 4.57 | 0.382E | 0.103E | 0.118 | 0.142 | 0.724 | 0.075 | 16 |
| 17 | 0.092 | 0.083 | 0.072 | 1.05 | 0.138 | 2.28 | 0.383E | 0.101E | 0.112 | 0.152 | 0.440 | 0.073A | 17 |
| 18 | 0.093 | 0.078 | 0.068 | 1.03 | 0.180 | 1.44 | 0.339E | 0.107E | 0.098 | 0.178 | 0.268 | 0.067A | 18 |
| 19 | 0.091 | 0.088 | 0.065 | 0.888 | 0.189 | 1.06 | 0.286A | 0.113E | 0.101 | 0.180 | 0.305 | 0.061A | 19 |
| 20 | 0.093 | 0.085 | 0.064 | 0.883 | 0.173 | 0.898 | 0.313 | 0.136E | 0.115 | 0.174 | 0.195 | 0.052A | 20 |
| 21 | 0.092 | 0.081 | 0.060 | 0.871 | 0.170 | 0.670 | 0.322 | 0.145E | 0.121 | 0.178 | 0.186 | 0.043A | 21 |
| 22 | 0.091 | 0.081 | 0.063 | 1.08 | 0.187 | 0.807 | 0.302 | 0.170E | 0.111 | 0.183 | 0.190 | 0.038A | 22 |
| 23 | 0.093 | 0.087 | 0.068 | 1.88 | 0.183 | 0.608 | 0.287 | 0.178E | 0.115 | 0.148 | 0.217 | 0.035A | 23 |
| 24 | 0.097 | 0.087 | 0.068 | 1.48 | 0.148 | 0.380 | 0.328 | 0.179A | 0.118 | 0.147 | 0.214 | 0.034A | 24 |
| 25 | 0.099 | 0.081 | 0.071 | 1.14 | 0.218 | 0.388 | 0.310 | 0.154 | 0.116 | 0.148 | 0.198 | 0.041A | 25 |
| 26 | 0.099 | 0.089 | 0.068 | 0.801 | 0.558 | 0.354 | 0.188 | 0.137 | 0.112 | 0.147 | 0.186 | 0.048A | 26 |
| 27 | 0.098 | 0.088 | 0.066 | 0.608 | 0.627 | 0.350 | 0.182 | 0.106 | 0.112 | 0.169 | 0.178 | 0.049A | 27 |
| 28 | 0.092 | 0.054 | 0.069 | 0.533 | 0.471 | 0.343A | 0.157 | 0.108 | 0.108 | 0.173 | 0.182 | 0.057A | 28 |
| 29 | 0.090 | | 0.103 | 0.460 | 0.384 | 0.348E | 0.158 | 0.131 | 0.108 | 0.172 | 0.182 | 0.063A | 29 |
| 30 | 0.089 | | 0.108 | 0.383 | 0.292 | 0.338E | 0.178 | 0.137 | 0.105 | 0.173 | 0.187 | 0.068A | 30 |
| 31 | 0.090 | | 0.114 | | 0.248 | | 0.172 | 0.127 | | 0.173 | | 0.063A | 31 |
| TOTAL | 2.883 | 2.078 | 2.083 | 22.883 | 7.361 | 34.028 | 9.271 | 4.888 | 4.108 | 4.842 | 8.801 | 2.761 | TOTAL |
| MEAN | 0.097 | 0.074 | 0.067 | 0.783 | 0.237 | 1.13 | 0.289 | 0.151 | 0.137 | 0.147 | 0.230 | 0.088 | MEAN |
| MAX | 0.106 | 0.082 | 0.114 | 1.88 | 0.627 | 7.77 | 0.480 | 0.202 | 0.250 | 0.180 | 0.724 | 0.157 | MAX |
| MIN | 0.089 | 0.054 | 0.041 | 0.133 | 0.128 | 0.114 | 0.157 | 0.101 | 0.098 | 0.100 | 0.152 | 0.034 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.284
MAXIMUM DAILY, 7.77 ON JUN 14
MINIMUM DAILY, 0.034A ON DEC 24
MAXIMUM INSTANTANEOUS,
8.87 AT 10:23 CST ON JUN 14

### SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 21 20 N
LONG 97 30 50 W
DRAINAGE AREA, 1 730 km²
A - MANUAL GAUGE

E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 259 | JUL | 801 |
| FEB | 178 | AUG | 406 |
| MAR | 180 | SEP | 385 |
| APR | 1 980 | OCT | 393 |
| MAY | 838 | NOV | 896 |
| JUN | 2 940 | DEC | 238 |

TOTAL DISCHARGE, 8 880 dam³

## FOOTPRINT LAKE AT NELSON HOUSE - STATION NO. 05TF001

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 242.888 | 242.877 | 242.889 | 242.888 | 242.518 | 242.858 | 242.784 | 243.318 | --- | 242.842 | 242.870 | 243.320 | 1 |
| 2 | 242.712 | 242.870 | 242.889 | 242.884 | 242.529 | 242.848 | 242.800 | 243.331 | --- | 242.835 | 242.884 | 243.335 | 2 |
| 3 | 242.728 | 242.866 | 242.881 | 242.879 | 242.542 | 242.832 | 243.807 | 243.331 | --- | 242.805 | 242.884 | 243.340 | 3 |
| 4 | 242.745 | 242.868 | 242.885 | 242.872 | 242.556 | 242.819 | 242.818 | 243.344 | --- | 242.588 | 242.911 | 243.350 | 4 |
| 5 | 242.766 | 242.873 | 242.887 | 242.867 | 242.576 | 242.806 | 242.825 | 243.388 | --- | 242.588 | 242.927 | 243.345 | 5 |
| 6 | 242.783 | 242.878 | 242.888 | 242.883 | 242.587 | 242.802 | 242.833 | 243.380 | --- | 242.840 | 242.935 | 243.324 | 6 |
| 7 | 242.787 | 242.873 | 242.878 | 242.862 | 242.583 | 242.877 | 242.827 | 243.381 | --- | 242.833 | 242.948 | 243.335 | 7 |
| 8 | 242.770 | 242.871 | 242.882 | 242.808 | 242.600 | 242.888 | 242.842 | 243.383 | 243.243A | 242.805 | 242.867 | 243.334 | 8 |
| 9 | 242.775 | 242.878 | 242.882 | 243.771 | 242.605 | 242.848 | 242.861 | 243.388 | 243.232 | 242.480A | 242.988 | 243.332 | 9 |
| 10 | 242.774 | 242.879 | 242.880 | 242.740 | 242.608 | 242.831 | 242.858 | 243.388A | 243.228 | --- | 242.987 | 243.334 | 10 |
| 11 | 242.777 | 242.881 | 242.876 | 242.718 | 242.608 | 242.818 | 242.883 | --- | 243.214 | --- | 242.981 | 243.331 | 11 |
| 12 | 242.780 | 242.886 | 242.878 | 242.888 | 242.602 | 242.811 | 242.870 | --- | 243.200 | --- | 242.988 | 243.322 | 12 |
| 13 | 242.785 | 242.888 | 242.878 | 242.871 | 242.601 | 242.808 | 242.885 | --- | 243.182 | --- | 242.988 | 243.320A | 13 |
| 14 | 242.788 | 242.879 | 242.873 | 242.849 | 242.598 | 242.800 | 242.913 | --- | 243.170 | --- | 242.988 | --- | 14 |
| 15 | 242.787 | 242.878 | 242.873 | 242.834 | 242.598 | 242.488 | 242.948 | --- | 243.158 | --- | 243.013 | --- | 15 |
| 16 | 242.807 | 242.878 | 242.873 | 242.814 | 242.584 | 242.472 | 242.882 | --- | 243.132 | --- | 243.032 | --- | 16 |
| 17 | 242.813 | 242.872 | 242.873 | 242.887 | 242.585 | 242.478 | 243.022 | --- | 243.103 | --- | 243.088 | --- | 17 |
| 18 | 242.827 | 242.874 | 242.874 | 242.882 | 242.605 | 242.488 | 243.081 | --- | 243.078 | --- | 243.085 | --- | 18 |
| 19 | 242.824 | 242.874 | 242.876 | 242.888 | 242.587 | 242.518 | 243.073 | --- | 243.043 | --- | 243.117 | --- | 19 |
| 20 | 242.848 | 242.873 | 242.873 | 242.887 | 242.620 | 243.848 | 243.083 | --- | 243.004 | --- | 243.144 | --- | 20 |
| 21 | 242.884 | 242.888 | 242.874 | 242.883 | 242.848 | 242.878 | 243.121 | --- | 242.982 | --- | 243.183 | --- | 21 |
| 22 | 242.874 | 242.884 | 242.873 | 242.884 | 242.871 | 242.808 | 243.141 | --- | 242.924 | --- | 243.184 | --- | 22 |
| 23 | 242.881 | 242.884 | 242.878 | 242.878 | 242.894 | 242.820 | 243.171 | --- | 242.880 | 242.888A | 243.187 | --- | 23 |
| 24 | 242.888 | 242.882 | 242.878 | 242.878 | 242.701 | 242.852 | 243.180 | --- | 242.848 | 242.832 | 243.218 | --- | 24 |
| 25 | 242.888 | 242.881 | 242.877 | 242.888 | 242.870 | 243.208 | --- | --- | 242.820 | 242.872 | 243.241 | --- | 25 |
| 26 | 242.810 | 242.888 | 242.878 | 242.887 | 242.704 | 242.885 | 243.221 | --- | 242.791 | 242.898 | 243.267 | --- | 26 |
| 27 | 242.814 | 242.881 | 242.881 | 242.848 | 242.880 | 242.717 | 243.234 | --- | 242.783 | 242.728 | 243.272 | --- | 27 |
| 28 | 242.808 | 242.888 | 242.880 | 242.831 | 242.884 | 242.731 | 243.253 | --- | 242.738 | 242.788 | 243.288 | --- | 28 |
| 29 | 242.811 | | 242.883 | 242.818 | 242.880 | 242.782 | 243.267 | 243.407A | 242.701 | 242.818 | 243.300 | --- | 29 |
| 30 | 242.888 | | 243.882 | 242.812 | 242.880 | 242.788 | 243.288 | --- | 242.885 | 242.828 | 243.308 | --- | 30 |
| 31 | 242.888 | | 243.888 | | 242.888 | | 243.308 | --- | | 242.861 | | --- | 31 |
| MEAN | 242.818 | 242.871 | 242.878 | 242.873 | 242.821 | 242.883 | 243.012 | --- | --- | --- | 243.089 | --- | MEAN |
| MAX | 242.814 | 242.888 | 242.888 | 242.888 | 242.704 | 242.788 | 243.308 | --- | --- | --- | 243.308 | --- | MAX |
| MIN | 242.888 | 242.888 | 242.888 | 242.812 | 242.518 | 242.472 | 242.784 | --- | --- | --- | 242.870 | --- | MIN |

### SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 56 48 00 N
LONG 98 51 00 W

A - MANUAL GAUGE

REGULATED SINCE 1978

DRAINAGE AREA,
1 440 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (MAN. HYDRO ELEV.)

## FOOTPRINT RIVER ABOVE FOOTPRINT LAKE - STATION NO. 06TF003

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | 1.08 | 3.08 | --- | --- | --- | 0.884 | 1.50 | --- | --- | 1 |
| 2 | --- | --- | --- | 1.08 | 3.48 | --- | --- | --- | 0.843 | 1.33 | --- | --- | 2 |
| 3 | --- | --- | --- | 1.11 | 3.88 | --- | --- | --- | 0.797 | 1.26 | --- | --- | 3 |
| 4 | --- | --- | --- | 1.10 | 4.33 | --- | --- | --- | 0.811 | 1.18 | --- | --- | 4 |
| 5 | --- | --- | --- | 1.10 | 4.83 | --- | --- | --- | 0.801 | 1.21 | --- | --- | 5 |
| 6 | 1.37A | --- | --- | 1.08 | 6.07 | --- | --- | --- | 0.884 | 1.38 | --- | --- | 6 |
| 7 | --- | --- | --- | 1.08 | 5.58 | --- | --- | --- | 0.808 | 1.18 | --- | --- | 7 |
| 8 | --- | --- | --- | 1.10 | 5.08 | --- | --- | --- | 0.854 | 1.17 | --- | --- | 8 |
| 9 | --- | --- | --- | 1.02 | 5.40 | --- | --- | --- | 0.888 | 1.18 | --- | --- | 9 |
| 10 | --- | --- | --- | 1.01 | 5.63 | --- | --- | --- | 1.08 | 1.12 | --- | --- | 10 |
| 11 | --- | --- | --- | 1.01 | 7.37 | --- | --- | --- | 1.08 | 1.08 | --- | --- | 11 |
| 12 | --- | --- | --- | 1.01 | 7.80 | --- | --- | --- | 0.843 | 1.08 | --- | --- | 12 |
| 13 | --- | --- | --- | 0.887 | 8.04 | --- | --- | --- | 1.03 | 1.10 | --- | --- | 13 |
| 14 | --- | --- | --- | 0.886 | 8.30 | --- | --- | --- | 1.07 | 1.08 | --- | --- | 14 |
| 15 | --- | --- | --- | 0.886 | 8.58 | --- | --- | --- | 1.08 | 1.07 | --- | --- | 15 |
| 16 | --- | --- | --- | 1.01 | 9.05 | --- | --- | 0.881A | 1.14 | 1.01 | --- | --- | 16 |
| 17 | --- | --- | --- | 1.02 | 9.37 | --- | --- | 0.788 | 1.24 | 0.946 | --- | --- | 17 |
| 18 | --- | --- | --- | 1.02 | 9.80 | --- | --- | 0.834 | 1.27 | 0.911 | --- | --- | 18 |
| 19 | --- | --- | --- | 1.02 | 9.80 | --- | --- | 0.882 | 1.27 | 0.884 | --- | --- | 19 |
| 20 | --- | --- | --- | 1.02 | 10.3 | --- | --- | 0.703 | 1.27 | 0.906 | --- | --- | 20 |
| 21 | --- | --- | --- | 1.00 | 10.8 | --- | --- | 0.708 | 1.23 | 0.888 | --- | --- | 21 |
| 22 | --- | --- | --- | 1.02 | 10.8 | --- | --- | 0.738 | 1.43 | 0.886 | --- | --- | 22 |
| 23 | --- | --- | --- | 1.33 | 11.0 | --- | --- | 0.701 | 1.19 | 0.873 | --- | --- | 23 |
| 24 | --- | --- | --- | 1.48 | 11.1 A | --- | --- | 0.731 | 1.32 | 0.887 | --- | --- | 24 |
| 25 | --- | --- | --- | 1.52 | --- | --- | --- | 0.842 | 1.43 | 0.884 | --- | --- | 25 |
| 26 | --- | --- | --- | 1.58 | --- | --- | --- | 1.08 | 1.31 | 0.795 | --- | --- | 26 |
| 27 | --- | --- | --- | 1.58 | --- | --- | --- | 1.02 | 1.30 | 1.18 | --- | --- | 27 |
| 28 | --- | --- | --- | 1.74 | --- | --- | --- | 0.883 | 1.38 | 1.28 | --- | --- | 28 |
| 29 | --- | | --- | 1.88 | --- | --- | --- | 0.883 | 1.35 | --- | --- | --- | 29 |
| 30 | --- | | 1.04A | 1.88 | --- | --- | --- | 0.835 | 1.37 | --- | --- | --- | 30 |
| 31 | --- | | 1.08 | | --- | | --- | 0.868 | | --- | | --- | 31 |
| TOTAL | --- | --- | --- | 35.831 | --- | --- | --- | --- | 33.306 | --- | --- | --- | TOTAL |
| MEAN | --- | --- | --- | 1.20 | --- | --- | --- | --- | 1.11 | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | 1.88 | --- | --- | --- | --- | 1.43 | --- | --- | --- | MAX |
| MIN | --- | --- | --- | 0.886 | --- | --- | --- | --- | 0.797 | --- | --- | --- | MIN |

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 55 58 00 N
LONG 66 53 10 W
DRAINAGE AREA, 890 km²
A - MANUAL GAUGE

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | --- |
| FEB | --- | AUG | --- |
| MAR | --- | SEP | 2 880 |
| APR | 3 100 | OCT | --- |
| MAY | --- | NOV | --- |
| JUN | --- | DEC | --- |

## FORK RIVER NEAR ETHELBERT - STATION NO. 05LJ010

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 00 | 0 8 | 0.030 | 0.0808 | 0.221 | 0.001 | 0.128 | 0.078 | --- | --- | 1 |
| 2 | --- | --- | 00 | 0.0728 | 0.028 | 0.0888 | 0.148 | 0.003 | 0.087 | 0.058 | --- | --- | 2 |
| 3 | --- | --- | 00 | 0.1078 | 0.021 | 0.0718 | 0.088 | 0.007 | 0.088 | 0.050 | --- | --- | 3 |
| 4 | --- | --- | 00 | 0.4328 | 0.082 | 0.0448 | 0.088 | 0.003 | 0.378 | 0.048 | --- | --- | 4 |
| 5 | --- | --- | 00 | 0.2838 | 0.048 | 0.0878 | 0.048 | 0.003 | 0.138 | 0.044 | --- | --- | 5 |
| 6 | --- | --- | 00 | 0.1888 | 0.038 | 0.0708 | 0.033 | 0.003 | 0.148 | 0.043 | --- | --- | 6 |
| 7 | --- | --- | 00 | 0.1338 | 0.038 | 0.1688 | 0.024 | 0.001 | 0.081 | 0.038 | --- | --- | 7 |
| 8 | --- | --- | 00 | 0.0888 | 0.031 | 0.1388 | 0.038 | 0.001 | 0.048 | 0.037 | --- | --- | 8 |
| 9 | --- | --- | 00 | 0.0488 | 0.044 | 0.1288 | 0.087 | 0 | 0.031 | 0.080 | --- | --- | 9 |
| 10 | --- | --- | 00 | 0.0388 | 0.048 | 0.1308 | 0.117 | 0 | 0.018 | 0.083 | --- | --- | 10 |
| 11 | --- | --- | 00 | 0.0308 | 0.048 | 0.1858 | 0.080 | 0 | 0.013 | 0.033 | --- | --- | 11 |
| 12 | --- | --- | 00 | 0.0278 | 0.048 | 0.8008 | 0.078 | 0 | 0.011 | 0.030 | --- | --- | 12 |
| 13 | --- | --- | 00 | 0.025 | 0.048 | 3.18 E | 0.148 | 0.083 | 0.011 | 0.128 | --- | --- | 13 |
| 14 | --- | --- | 00 | 0.0208 | 0.044 | 3.38 A | 0.081 | 0.073 | 0.030 | 0.187 | --- | --- | 14 |
| 15 | --- | --- | 00 | 0.0078 | 0.088 | 3.88 A | 0.048 | 0.017 | 0.014 | 0.288 | --- | --- | 15 |
| 16 | --- | --- | 00 | 0.048 | 0.088 | 1.83 | 0.031 | 0.038 | 0.007 | 0.218 | --- | --- | 16 |
| 17 | --- | --- | 00 | 0.038 | 0.047 | 1.48 | 0.017 | 0.014 | 0.008 | 0.188 | --- | --- | 17 |
| 18 | --- | --- | 00 | 0.030 | 0.033 | 1.01 | 0.011 | 0.074 | 0.007 | 0.158 | --- | --- | 18 |
| 19 | --- | --- | 00 | 0.020 | 0.027 | 0.867 | 0.010 | 0.024 | 0.008 | 0.138 | --- | --- | 19 |
| 20 | --- | --- | 00 | 0.028 | 0.047 | 0.818 | 0.008 | 0.018 | 0.028 | 0.128 | --- | --- | 20 |
| 21 | --- | --- | 00 | 0.033 | 0.044A | 0.344 | 0.007 | 0.009 | 0.084 | 0.104 | --- | --- | 21 |
| 22 | --- | --- | 00 | 0.031 | 0.0388 | 0.338 | 0.008 | 0.011 | 0.031 | 0.087 | --- | --- | 22 |
| 23 | --- | --- | 00 | 0.074 | 0.0388 | 0.378 | 0.003 | 0.018 | 0.018 | 0.084 | --- | --- | 23 |
| 24 | --- | --- | 00 | 0.328 | 0.0408 | 0.328 | 0.003 | 0.018 | 0.018 | 0.048 | --- | --- | 24 |
| 25 | --- | --- | 00 | 0.148 | 0.1588 | 0.188 | 0.003 | 0.188 | 0.032 | 0.034 | --- | --- | 25 |
| 26 | --- | --- | 00 | 0.080 | 0.1428 | 0.778 | 0.001 | 0.127 | 0.014 | 0.028 | --- | --- | 26 |
| 27 | --- | --- | 00 | 0.074 | 0.1188 | 0.888 | 0.001 | 0.087 | 0.028 | 0.172 | --- | --- | 27 |
| 28 | --- | --- | 00 | 0.061 | 0.0938 | 0.828 | 0.001 | 0.078 | 0.080 | 0.488 | --- | --- | 28 |
| 29 | --- | | 00 | 0.037 | 0.0808 | 0.448 | 0.001 | 0.880 | 0.077 | 0.403 | --- | --- | 29 |
| 30 | --- | | 00 | 0.031 | 0.0438 | 0.234 | 0.001 | 0.337 | 0.083 | 0.388 | --- | --- | 30 |
| 31 | --- | | 00 | | 0.0738 | | 0 | 0.188 | | 0.282 | | --- | 31 |
| TOTAL | --- | --- | 0 | 3.478 | 1.884 | 30.084 | 1.383 | 1.810 | 1.870 | 3.884 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.083 | 0.058 | 0.889 | 0.048 | 0.083 | 0.088 | 0.128 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.433 | 0.158 | 3.38 | 0.221 | 0.880 | 0.378 | 0.488 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0.028 | 0.044 | 0 | 0 | 0.008 | 0.023 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.128
MAXIMUM DAILY, 3.38A ON JUN 14
MINIMUM DAILY, 00 ON MAR 1

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 31 30 N
LONG 100 33 10 W
DRAINAGE AREA, 380 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 139 |
| FEB | --- | AUG | 185 |
| MAR | 0 | SEP | 144 |
| APR | 814 | OCT | 334 |
| MAY | 156 | NOV | --- |
| JUN | 1 740 | DEC | --- |

TOTAL DISCHARGE, 3 870 dam³

## GAINSBOROUGH CREEK NEAR LYLETON - STATION NO. 08NF007

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 08 | 0.0018 | 0.018 | 0.001 | 0.002 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 08 | 0.0218 | 0.018 | 0.001 | 0.001 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 08 | 0.2678 | 0.014 | 0.001 | 0.001 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 08 | 0.8238 | 0.013 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 08 | 1.30 B | 0.011 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 08 | 1.14 B | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 08 | 1.30 B | 0.007 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 08 | 1.26 B | 0.006 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 08 | 1.18 | 0.006 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 08 | 0.838 | 0.005 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 08 | 0.686 | 0.005 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 08 | 0.522 | 0.007 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 08 | 0.502 | 0.006 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 08 | 0.424 | 0.004 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 08 | 0.347 | 0.003 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 08 | 0.280 | 0.003 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 08 | 0.227 | 0.002 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 08 | 0.178 | 0.002 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 08 | 0.151 | 0.002 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 08 | 0.142 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 08 | 0.128 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 08 | 0.134 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 08 | 0.118 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 08 | 0.107 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 08 | 0.093 | 0.002 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 08 | 0.073 | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 08 | 0.088 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 08 | 0.040 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 08 | 0.027 | 0.002 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 08 | 0.020 | 0.001 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 08 | | 0.001 | | 0 | 0 | | 0 | --- | --- | 31 |
| TOTAL | --- | --- | 0 | 12.378 | 0.184 | 0.028 | 0.004 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.413 | 0.006 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 1.30 | 0.018 | 0.003 | 0.002 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.051
MAXIMUM DAILY, 1.300 ON APR 5
MINIMUM DAILY, 00 ON MAR 1
MAXIMUM INSTANTANEOUS,
1.760 AT 21:54 CST ON APR 6

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 05 45 N
LONG 101 11 00 W
DRAINAGE AREA, 1 130 km²
B - ICE CONDITIONS
REGULATED SINCE 1982

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0.35 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR 1 070 | | OCT | 0 |
| MAY | 13.3 | NOV | --- |
| JUN | 2.42 | DEC | --- |

TOTAL DISCHARGE, 1 090 dam³

## GARLAND RIVER NEAR DUCK RIVER - STATION NO. 05LG006

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 08 | 0.0228 | 0.477 | 0.388 | 1.83 | 0.003 | 0 | 0.001 | --- | --- | 1 |
| 2 | --- | --- | 08 | 0.0058 | 0.428 | 0.338 | 1.38 | 0.002 | 0 | 0.001 | --- | --- | 2 |
| 3 | --- | --- | 08 | 0.0838 | 0.405 | 0.326 | 1.04 | 0.001 | 0.001 | 0 | --- | --- | 3 |
| 4 | --- | --- | 08 | 0.5418 | 0.394 | 0.348 | 0.820 | 0.001 | 0.001 | 0 | --- | --- | 4 |
| 5 | --- | --- | 08 | 0.3368 | 0.388 | 0.360 | 0.648 | 0.008 | 0 | 0.001 | --- | --- | 5 |
| 6 | --- | --- | 08 | 0.3038 | 0.381 | 0.301 | 0.488 | 0.004 | 0.001 | 0.001 | --- | --- | 6 |
| 7 | --- | --- | 08 | 0.5288 | 0.373 | 0.270 | 0.383 | 0.002 | 0.001 | 0.001 | --- | --- | 7 |
| 8 | --- | --- | 08 | 0.6328 | 0.381 | 0.283 | 0.319 | 0.001 | 0.013 | 0.001 | --- | --- | 8 |
| 9 | --- | --- | 08 | 0.4378 | 0.334 | 0.680 | 0.271 | 0 | 0.014 | 0.001 | --- | --- | 9 |
| 10 | --- | --- | 08 | 0.2778 | 0.288 | 0.731 | 0.242 | 0 | 0.008 | 0.001 | --- | --- | 10 |
| 11 | --- | --- | 08 | 0.2678 | 0.288 | 0.687 | 0.202 | 0 | 0.008 | 0.001 | --- | --- | 11 |
| 12 | --- | --- | 08 | 0.3308 | 0.288 | 0.614 | 0.204 | 0 | 0.0088 | 0.016 | --- | --- | 12 |
| 13 | --- | --- | 08 | 0.3678 | 0.301 | 1.63 | 0.168 | 0 | 0.0032 | 0.027 | --- | --- | 13 |
| 14 | --- | --- | 08 | 0.3838 | 0.300 | 2.33 | 0.160 | 0 | 0.0028 | 0.038 | --- | --- | 14 |
| 15 | --- | --- | 08 | 0.6378 | 0.314 | 2.27 | 0.137 | 0 | 0.0028 | 0.037 | --- | --- | 15 |
| 16 | --- | --- | 08 | 1.02 B | 0.308 | 2.01 | 0.104 | 0 | 0.0018 | 0.055 | --- | --- | 16 |
| 17 | --- | --- | 08 | 1.01 B | 0.313 | 1.68 | 0.083 | 0 | 0.0018 | 0.080 | --- | --- | 17 |
| 18 | --- | --- | 08 | 0.8088 | 0.308 | 1.41 | 0.071 | 0 | 0 B | 0.108 | --- | --- | 18 |
| 19 | --- | --- | 08 | 1.03 B | 0.287 | 1.20 | 0.060 | 0 | 0 B | 0.117 | --- | --- | 19 |
| 20 | --- | --- | 08 | 0.8778 | 0.286 | 1.01 | 0.059 | 0 | 0 B | 0.098 | --- | --- | 20 |
| 21 | --- | --- | 08 | 0.6848 | 0.318 | 0.849 | 0.052 | 0 | 0 B | 0.078 | --- | --- | 21 |
| 22 | --- | --- | 08 | 0.767 | 0.330 | 0.680 | 0.043 | 0 | 0 B | 0.078 | --- | --- | 22 |
| 23 | --- | --- | 08 | 0.813 | 0.380 | 0.581 | 0.037 | 0 | 0.0018 | 0.087 | --- | --- | 23 |
| 24 | --- | --- | 08 | 1.03 | 0.413 | 0.488 | 0.032 | 0 | 0.0018 | 0.088 | --- | --- | 24 |
| 25 | --- | --- | 08 | 1.14 | 0.408 | 0.438 | 0.030 | 0 | 0.0018 | 0.087 | --- | --- | 25 |
| 26 | --- | --- | 08 | 1.00 | 0.401 | 0.387 | 0.014 | 0 | 0.001E | 0.083 | --- | --- | 26 |
| 27 | --- | --- | 08 | 0.808 | 0.748 | 0.802 | 0.012 | 0 | 0.001A | 0.130 | --- | --- | 27 |
| 28 | --- | --- | 08 | 0.678 | 0.823 | 1.67 | 0.006 | 0 | 0 | 0.188 | --- | --- | 28 |
| 29 | --- | | 08 | 0.800 | 0.888 | 2.40 | 0.006 | 0.001 | 0 | 0.351 | --- | --- | 29 |
| 30 | --- | | 08 | 0.630 | 0.802 | 2.38 | 0.008 | 0 | 0 | 0.330 | --- | --- | 30 |
| 31 | --- | | 08 | | 0.478 | | 0.006 | 0 | | 0.388 | --- | --- | 31 |
| TOTAL | --- | --- | 0 | 18.228 | 13.418 | 29.886 | 6.889 | 0.021 | 0.070 | 3.244 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.808 | 0.401 | 0.988 | 0.287 | 0.001 | 0.002 | 0.072 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 1.14 | 0.823 | 2.40 | 1.83 | 0.008 | 0.014 | 0.388 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.006 | 0.288 | 0.270 | 0.006 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.202
MAXIMUM DAILY, 2.40 ON JUN 20
MINIMUM DAILY, 00 ON MAR 1
MAXIMUM INSTANTANEOUS,
2.68 AT 14:40 CST ON JUN 14

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 51 08 N
LONG 100 14 58 W
DRAINAGE AREA, 440 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 788 |
| FEB | --- | AUG | 1.61 |
| MAR | 0 | SEP | 0.05 |
| APR 1 570 | | OCT | 194 |
| MAY 1 070 | | NOV | --- |
| JUN 2 680 | | DEC | --- |

TOTAL DISCHARGE, 8 170 dam³

## GAUER RIVER BELOW THORSTEINSON LAKE - STATION NO. 05PA001

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18.38 | 12.48 | 10.5 B | 9.048 | 8.408 | 134 | 84.8 | 53.7 | 42.6 | 26.4 | 20.6E | 14.48 | 1 |
| 2 | 18.38 | 12.38 | 10.4 B | 9.048 | 8.488 | 124 | 83.7 | 54.1 | 42.4 | 26.4 | 20.6E | 14.28 | 2 |
| 3 | 18.38 | 12.38 | 10.3 B | 8.888 | 8.488 | 121 | 84.3 | 49.4 | 42.3 | 26.3 | 20.3E | 14.08 | 3 |
| 4 | 18.18 | 12.28 | 10.2 B | 8.888 | 8.618 | 122 | 84.0 | 45.1 | 41.6 | 27.3 | 20.1B | 13.98 | 4 |
| 5 | 18.08 | 12.18 | 10.2 B | 8.928 | 8.678 | 118 | 83.7 | 42.8 | 39.8 | 23.8 | 20.08 | 13.78 | 5 |
| 6 | 14.88 | 12.08 | 10.2 B | 8.928 | 8.838 | 117 | 83.2 | 43.2 | 38.2 | 23.1 | 19.88 | 13.58 | 6 |
| 7 | 14.88 | 11.88 | 10.1 B | 8.888 | 8.928 | 116 | 82.5 | 43.3 | 38.0 | 29.2 | 19.28 | 13.48 | 7 |
| 8 | 14.78 | 11.88 | 10.0 B | 8.888 | 9.218 | 114 | 81.8 | 43.2 | 38.4 | 27.5 | 19.18 | 13.38 | 8 |
| 9 | 14.68 | 11.68 | 10.0 B | 8.808 | 9.878 | 110 | 80.3 | 43.0 | 36.5 | 26.4 | 19.08 | 13.28 | 9 |
| 10 | 14.58 | 11.78 | 9.948 | 8.788 | 10.6 B | 108 | 80.0 | 42.8 | 35.5 | 25.4 | 18.88 | 13.18 | 10 |
| 11 | 14.48 | 11.68 | 9.878 | 8.888 | 12.5 B | 106 | 80.2 | 42.8 | 34.3 | 26.0 | 18.48 | 13.18 | 11 |
| 12 | 14.48 | 11.68 | 9.808 | 8.838 | 22.2 B | 103 | 83.8 | 38.8 | 35.6 | 23.3 | 18.28 | 13.08 | 12 |
| 13 | 14.48 | 11.58 | 9.728 | 8.838 | 56.2 B | 103 | 82.3 | 37.4 | 34.7 | 25.0 | 18.08 | 12.88 | 13 |
| 14 | 14.48 | 11.48 | 9.658 | 8.678 | 94.4 B | 102 | 81.1 | 36.7 | 34.3 | 25.7 | 17.78 | 12.78 | 14 |
| 15 | 14.28 | 11.48 | 9.578 | 8.578 | 101 | 102 | 78.8 | 36.1 | 33.0 | 26.8 | 17.88 | 12.88 | 15 |
| 16 | 14.18 | 11.28 | 9.578 | 8.578 | 102 | 101 | 78.2 | 36.1 | 32.5 | 24.7A | 17.18 | 12.88 | 16 |
| 17 | 14.08 | 11.18 | 9.508 | 8.578 | 102 | 99.2 | 74.0 | 34.6 | 33.1 | 24.4E | 17.08 | 12.48 | 17 |
| 18 | 13.88 | 11.18 | 9.508 | 8.518 | 104 | 102 | 72.7 | 33.3 | 30.6 | 24.1E | 16.88 | 12.38 | 18 |
| 19 | 13.88 | 11.18 | 9.508 | 8.408 | 106 | 106 | 71.5 | 32.2 | 32.0 | 23.9E | 16.58 | 12.28 | 19 |
| 20 | 13.68 | 11.18 | 9.448 | 8.348 | 106 | 109 | 70.4 | 33.7 | 28.4 | 23.5E | 16.38 | 13.28 | 20 |
| 21 | 13.38 | 11.08 | 9.448 | 8.348 | 110 | 109 | 69.0 | 34.3 | 31.1 | 23.3E | 16.18 | 12.18 | 21 |
| 22 | 13.28 | 11.08 | 9.388 | 8.348 | 114 | 108 | 67.2 | 31.0 | 28.0 | 23.2E | 16.08 | 12.08 | 22 |
| 23 | 13.18 | 10.98 | 9.338 | 8.348 | 118 | 108 | 64.1 | 30.8 | 34.0 | 22.9E | 15.78 | 11.98 | 23 |
| 24 | 13.18 | 10.88 | 9.338 | 8.348 | 122 | 104 | 63.7 | 31.0 | 30.8 | 22.7E | 15.58 | 11.88 | 24 |
| 25 | 13.08 | 10.88 | 9.278 | 8.348 | 122 | 102 | 62.7 | 31.0 | 28.1 | 22.3E | 15.48 | 11.68 | 25 |
| 26 | 12.98 | 10.78 | 9.218 | 8.408 | 124 | 100 | 67.1 | 35.2 | 31.6 | 22.0E | 15.28 | 11.78 | 26 |
| 27 | 12.68 | 10.68 | 9.218 | 8.408 | 126 | 97.8 | 57.3 | 36.6 | 30.6 | 21.8E | 15.18 | 11.68 | 27 |
| 28 | 12.68 | 10.58 | 9.158 | 8.408 | 126 | 96.5 | 57.8 | 38.2 | 27.2 | 21.6E | 15.08 | 11.68 | 28 |
| 29 | 12.58 | | 9.158 | 8.408 | 126 | 96.4 | 57.2 | 40.8 | 29.7 | 21.4E | 14.88 | 11.58 | 29 |
| 30 | 12.58 | | 9.098 | 8.408 | 126 | 96.3 | 56.6 | 41.3 | 29.7 | 21.2E | 14.68 | 11.48 | 30 |
| 31 | 12.58 | | 9.048 | | 126 | | 53.7 | 42.1 | | 21.0E | | 11.48 | 31 |
| TOTAL | 432.0 | 318.9 | 299.58 | 266.33 | 2 234.33 | 3 226.2 | 2 365.6 | 1 218.5 | 1 035.4 | 751.4 | 523.8 | 391.3 | TOTAL |
| MEAN | 13.9 | 11.4 | 9.66 | 8.81 | 72.1 | 108 | 76.3 | 39.2 | 34.2 | 24.2 | 17.5 | 12.6 | MEAN |
| MAX | 18.3 | 12.4 | 10.5 | 9.04 | 126 | 124 | 84.8 | 54.1 | 42.6 | 28.3 | 20.6 | 14.4 | MAX |
| MIN | 12.5 | 10.5 | 9.04 | 8.34 | 8.40 | 96.3 | 53.7 | 30.8 | 27.2 | 21.0 | 14.8 | 11.4 | MIN |

### SUMMARY FOR THE YEAR 1989

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 35.7
MAXIMUM DAILY, 126 ON MAY 29
MINIMUM DAILY, 8.34B ON APR 20
MAXIMUM INSTANTANEOUS,
132 AT 12:36 CST ON MAY 31

TYPE OF GAUGE - RECORDING
LOCATION - LAT 57 18 08 N
LONG 97 31 24 W
DRAINAGE AREA, 5 980 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 37 300 | JUL | 204 000 |
| FEB | 27 800 | AUG | 105 000 |
| MAR | 25 800 | SEP | 88 800 |
| APR | 22 300 | OCT | 64 800 |
| MAY | 183 000 | NOV | 45 300 |
| JUN | 279 000 | DEC | 33 800 |

TOTAL DISCHARGE, 1 130 000 dam³

## GIMBY CREEK NEAR CARTWRIGHT - STATION NO. 05DA015

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.010 | 0 | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.005 | 0 | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | 0B | 5.81 B | 0.007 | 0 | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | 0B | 10.1 B | 0.007 | 0 | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | 0B | 4.88 | 0.004 | 0 | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | 0B | 2.28 | 0.002 | 0 | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.940 | 0.001 | 0.001 | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.345A | 0.002 | 0 | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.228A | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.284 | 0.002 | 0 | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.228 | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.178 | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.173 | 0.001 | 0.003 | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.148 | 0.001 | 0.008 | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.138 | 0.001 | 0.010 | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.107 | 0.001 | 0.005 | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.071 | 0.006 | 0.007 | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.060 | 0.007 | 0.004 | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.045 | 0.007 | 0.003 | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.038 | 0.007 | 0.002 | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.034 | 0.005 | 0.001 | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.033 | 0.003 | 0 | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.028 | 0.003 | 0 | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.026 | 0.005 | 0 | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.022 | 0.006 | 0 | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.018 | 0.004 | 0 | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.016 | 0.002 | 0 | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.013 | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | 0B | 0.012 | 0.001 | 0.001 | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | 0B | 0.012 | 0 | 0 | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | --- | --- | | --- | | --- | 31 |
| TOTAL | --- | --- | 0 | 30.448 | 0.107 | 0.049 | --- | --- | --- | --- | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 1.01 | 0.003 | 0.002 | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | 0 | 10.1 | 0.010 | 0.010 | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO JUN

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.281
MAXIMUM DAILY, 10.1B ON APR 4
MINIMUM DAILY, 0B ON MAR 1

TYPE OF GAUGE - RECORDING
LOCATION - LAT 48 04 40 N
LONG 58 21 00 W
DRAINAGE AREA, 230 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | --- |
| FEB | --- | AUG | --- |
| MAR | 0 | SEP | --- |
| APR | 2 630 | OCT | --- |
| MAY | 8.24 | NOV | --- |
| JUN | 4.33 | DEC | --- |

TOTAL DISCHARGE, 2 640 dam³

## GODS RIVER NEAR SHAMATTAWA - STATION NO. 04AD002

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 87.5B | 87.0B | 84.4B | 81.0B | 85.1B | --- | --- | --- | --- | 3258 | 3238 | 2058 | 1 |
| 2 | 86.4B | 87.0B | 84.4B | 81.5B | 93.2B | --- | --- | --- | --- | 3258 | 3138 | 2028 | 2 |
| 3 | 86.1B | 87.0B | 84.0B | 81.5B | 103 B | --- | --- | --- | --- | 3258 | 3068 | 2008 | 3 |
| 4 | 85.7B | 87.0B | 84.0B | 81.5B | 111 B | --- | --- | --- | --- | 3258 | 2988 | 1988 | 4 |
| 5 | 85.7B | 87.0B | 83.8B | 81.2B | 126 B | --- | --- | --- | --- | 3238 | 2938 | 1968 | 5 |
| 6 | 85.0B | 87.0B | 83.5B | 81.2B | 148 B | --- | --- | --- | --- | 3238 | 2888 | 1948 | 6 |
| 7 | 84.3B | 87.0B | 83.5B | 80.8B | 161 B | --- | --- | --- | --- | 3238 | 2838 | 1928 | 7 |
| 8 | 83.8B | 87.0B | 83.3B | 80.8B | 253 B | --- | --- | --- | --- | 3428 | 2788 | 1828 | 8 |
| 9 | 82.8B | 87.2B | 83.3B | 80.4B | 326 B | --- | --- | --- | --- | 3498 | 2738 | 1808 | 9 |
| 10 | 82.2B | 87.2B | 83.3B | 80.4B | 387 B | --- | --- | --- | --- | 2838 | 2688 | 1808 | 10 |
| 11 | 81.8B | 87.2B | 83.3B | 80.1B | 458 B | --- | --- | --- | --- | 2568 | 2638 | 1888 | 11 |
| 12 | 81.5B | 86.8B | 83.3B | 80.1B | 573 B | --- | --- | --- | --- | 2838 | 2618 | 1888 | 12 |
| 13 | 81.1B | 86.8B | 83.0B | 79.7B | 843 B | --- | --- | --- | --- | 2718 | 2568 | 1818 | 13 |
| 14 | 80.8B | 86.5B | 82.9B | 79.7B | --- | 324A | --- | --- | --- | 3168 | 2538 | 1838 | 14 |
| 15 | 80.4B | 86.1B | 82.9B | 79.7B | --- | 271A | --- | --- | --- | 3438 | 2498 | 1818 | 15 |
| 16 | 80.0B | 86.1B | 82.8B | 79.7B | --- | 282A | --- | --- | --- | 3518 | 2448 | 1808 | 16 |
| 17 | 89.7B | 85.8B | 82.6B | 79.4B | --- | 248A | --- | --- | --- | 3578 | 2428 | 1788 | 17 |
| 18 | 89.7B | 85.8B | 82.6B | 79.4B | --- | --- | --- | --- | --- | 3568 | 2398 | 1778 | 18 |
| 19 | 89.3B | 85.4B | 82.6B | 79.0B | --- | --- | --- | --- | --- | 3558 | 2378 | 1768 | 19 |
| 20 | 88.3B | 85.4B | 82.2B | 79.0B | --- | --- | --- | --- | --- | 3548 | 2368 | 1758 | 20 |
| 21 | 89.3B | 85.4B | 82.3B | 78.7B | --- | --- | --- | --- | --- | 3538 | 2328 | 1748 | 21 |
| 22 | 89.0B | 85.4B | 82.2B | 78.7B | --- | --- | --- | --- | --- | 3528 | 2288 | 1738 | 22 |
| 23 | 89.0B | 85.4B | 82.2B | 78.3B | --- | --- | --- | --- | --- | 3518 | 2268 | 1728 | 23 |
| 24 | 88.6B | 85.1B | 81.9B | 78.3B | --- | --- | --- | --- | --- | 3498 | 2238 | 1718 | 24 |
| 25 | 88.6B | 85.1B | 81.9B | 77.9B | --- | --- | --- | --- | --- | 3488 | 2218 | 1688 | 25 |
| 26 | 88.6B | 85.1B | 81.8B | 77.9B | --- | --- | --- | --- | 227A | 3478 | 2188 | 1888 | 26 |
| 27 | 88.6B | 85.1B | 81.8B | 77.9B | --- | --- | --- | --- | 227E | 3438 | 2198 | 1678 | 27 |
| 28 | 88.3B | 85.1B | 81.8B | 79.4B | --- | --- | --- | --- | 237E | 3418 | 2128 | 1668 | 28 |
| 29 | 88.3B | | 81.8B | 80.1B | --- | --- | --- | --- | 226E | 3388 | 2098 | 1658 | 29 |
| 30 | 88.3B | | 81.8B | 80.4B | --- | --- | --- | --- | 228E | 3338 | 2078 | 1688 | 30 |
| 31 | 88.3B | | 81.8B | | --- | | --- | --- | | 3288 | | 1648 | 31 |
| TOTAL | 2 826.3 | 2 420.1 | 2 586.0 | 2 384.6 | --- | --- | --- | --- | --- | 9 337 | 7 893 | 5 828 | TOTAL |
| MEAN | 91.2 | 86.4 | 82.8 | 79.8 | --- | --- | --- | --- | --- | 301 | 263 | 182 | MEAN |
| MAX | 97.5 | 87.2 | 84.4 | 81.5 | --- | --- | --- | --- | --- | 357 | 323 | 205 | MAX |
| MIN | 86.3 | 85.1 | 81.8 | 77.9 | --- | --- | --- | --- | --- | 223 | 207 | 164 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MINIMUM DAILY, 77.9B ON APR 25

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 55 51 00 N
LONG 92 05 55 W
DRAINAGE AREA, 85 500 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 244 000 | JUL | --- |
| FEB | 208 000 | AUG | --- |
| MAR | 222 000 | SEP | --- |
| APR | 207 000 | OCT | 807 000 |
| MAY | --- | NOV | 686 000 |
| JUN | --- | DEC | 488 000 |

## GOPHER CREEK NEAR GLADSTONE - STATION NO. 05LL024

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0.001B | 0 | 0 | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | 0B | 0.040B | 0 | 0 | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | 0B | 0.031B | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | 0B | 0.006B | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | 0B | 0.003B | 0 | 0 | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | 0B | 0.002B | 0 | 0 | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.002B | 0 | 0 | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.014B | 0 | 0 | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.006B | 0 | 0 | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.002B | 0 | 0 | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.003B | 0 | 0 | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.003B | 0 | 0.081 | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.001B | 0 | 0.082 | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.001B | 0 | 0.040 | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.001B | 0 | 0.017 | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.001B | 0 | 0.006 | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | 0B | 0 | 0 | 0.003 | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | 0B | 0 | 0 | 0.003 | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | 0B | 0 | 0 | 0.002 | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | 0B | 0 | 0 | 0.001 | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | 0B | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | 0B | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | 0B | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.001 | 0 | 0 | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.001 | 0 | 0 | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.001 | 0 | 0 | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.001 | 0 | 0.001 | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.001 | 0 | 0.001 | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | 0B | 0 | 0 | 0.002 | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | 0B | 0.001 | 0 | 0.001 | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | --- | --- | | --- | | --- | 31 |
| TOTAL | --- | --- | 0 | 0.126 | 0.002 | 0.330 | --- | --- | --- | --- | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.004 | 0 | 0.007 | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.040 | 0.001 | 0.082 | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.003
MAXIMUM DAILY, 0.082 ON JUN 13
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
0.133B AT 22:03 CST ON APR 3

SUMMARY FOR THE MONTHS MAR TO JUN

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 13 27 N
LONG 96 58 38 W
DRAINAGE AREA, 50.0 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | --- |
| FEB | --- | AUG | --- |
| MAR | 0 | SEP | --- |
| APR | 10.8 | OCT | --- |
| MAY | 0.17 | NOV | --- |
| JUN | 19.0 | DEC | --- |

TOTAL DISCHARGE, 30.0 dam³

## GOPHER CREEK NEAR VIRDEN - STATION NO. 05MG003

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0.0038 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0.0488 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0.1088 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0.2488 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0.1888 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0.1438 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.1018 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.0718 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.0448 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.0188 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.0088 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.0048 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.0028 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.0018 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.0018 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.0018 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.0018 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.0018 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.0018 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.0018 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.0018 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.0018 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.0028 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.0038 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.0028 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.0028 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.001A | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.0018 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 1.002 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.033 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.249 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.004
MAXIMUM DAILY, 0.2488 ON APR 4
MINIMUM DAILY, 0B ON MAR 1

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 47 00 N
LONG 100 57 52 W
DRAINAGE AREA, 298 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 86.6 | OCT | 0 |
| MAY | 0 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, 86.6 dam³

## COUDNEY RESERVOIR NEAR PILOT MOUND - STATION NO. 05OB803

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | 450.651 | --- | 450.981 | 451.782 | 451.678 | 451.628 | 451.418 | 450.958 | 450.888 | 450.677E | --- | 1 |
| 2 | --- | --- | --- | 450.967 | 451.781 | 451.673 | 451.624 | 451.411 | 450.950 | 450.881 | 450.673 | --- | 2 |
| 3 | --- | --- | --- | 450.966 | 451.780 | 451.668 | 451.618 | 451.410 | 450.963 | 450.874 | 450.675E | --- | 3 |
| 4 | --- | --- | --- | 450.915 | 451.788 | 451.660 | 451.611 | 451.408 | 450.962 | 450.872 | 450.678E | --- | 4 |
| 5 | --- | --- | --- | 450.884 | 451.785 | 451.657 | 451.607 | 451.397 | 450.957 | 450.872 | 450.676E | --- | 5 |
| 6 | --- | --- | --- | 450.724 | 451.780 | 451.657 | 451.600 | 451.387 | 450.953 | 450.888 | 450.680E | 450.832 | 6 |
| 7 | --- | --- | --- | 450.766 | 451.778 | 451.648 | 451.588 | 451.380 | 450.943 | 450.885 | 450.681E | --- | 7 |
| 8 | --- | --- | --- | 450.771 | 451.785 | 451.664 | 451.584 | 451.371 | 450.935 | 450.883 | 450.683 | --- | 8 |
| 9 | --- | --- | --- | 450.779 | 451.780 | 451.662 | 451.581 | 451.363 | 450.927 | 450.881 | --- | --- | 9 |
| 10 | --- | --- | --- | 450.780 | 451.777 | 451.656 | 451.576 | 451.356 | 450.923 | 450.858 | --- | --- | 10 |
| 11 | --- | --- | --- | 450.809 | 451.763 | 451.652 | 451.571 | 451.366 | 450.981 | 450.807 | --- | --- | 11 |
| 12 | --- | --- | --- | 450.842 | 451.748 | 451.663 | 451.563 | 451.372 | 450.978 | 450.704 | --- | --- | 12 |
| 13 | --- | --- | --- | 450.938 | 451.736 | 451.663 | 451.556 | 451.366 | 450.974 | 450.702 | --- | --- | 13 |
| 14 | --- | --- | --- | 451.320 | 451.734 | 451.664 | 451.548 | 451.383 | 450.971 | 450.887 | --- | --- | 14 |
| 15 | --- | --- | --- | 451.721 | 451.733 | 451.663 | 451.543 | 451.367 | 450.970 | 450.893 | --- | --- | 15 |
| 16 | --- | --- | --- | 451.842 | 451.727 | 451.660 | 451.533 | 451.371 | 450.988 | 450.890 | 450.888 | --- | 16 |
| 17 | --- | --- | --- | 451.860 | 451.726 | 451.678 | 451.526 | 451.183 | 450.981 | 450.888 | --- | --- | 17 |
| 18 | --- | --- | --- | 451.842 | 451.732 | 451.671 | 451.519 | 451.100 | 450.954 | 450.887 | --- | --- | 18 |
| 19 | --- | --- | --- | 451.830 | 451.730 | 451.664 | 451.514 | 451.005 | 450.950 | 450.884 | --- | --- | 19 |
| 20 | --- | --- | --- | 451.823 | 451.721 | 451.667 | 451.508 | 451.000 | 450.947 | 450.883 | --- | --- | 20 |
| 21 | --- | --- | --- | 451.820 | 451.714 | 451.660 | 451.497 | 450.988 | 450.943 | 450.883 | --- | --- | 21 |
| 22 | --- | --- | 450.871 | 451.821 | 451.708 | 451.644 | 451.487 | 451.002 | 450.934 | 450.880 | --- | --- | 22 |
| 23 | --- | --- | 450.872E | 451.833 | 451.705 | 451.638 | 451.476 | 450.988 | 450.927 | 450.880 | --- | --- | 23 |
| 24 | --- | 450.868 | 450.873E | 451.826 | 451.703 | 451.635 | 451.467 | 450.983 | 450.919 | 450.880 | --- | --- | 24 |
| 25 | --- | --- | 450.873E | 451.820 | 451.688 | 451.636 | 451.458 | 450.988 | 450.912 | 450.893 | --- | --- | 25 |
| 26 | --- | --- | 450.874E | 451.812 | 451.895 | 451.630 | 451.451 | 450.988 | 450.909 | 450.891E | --- | --- | 26 |
| 27 | --- | --- | 450.876E | 451.807 | 451.894 | 451.626 | 451.442 | 450.988 | 450.904 | 450.889E | --- | --- | 27 |
| 28 | --- | --- | 450.878E | 451.800 | 451.895 | 451.620 | 451.435 | 450.981 | 450.899 | 450.887E | --- | --- | 28 |
| 29 | --- | | 450.878E | 451.787 | 451.888 | 451.633 | 451.431 | 450.973 | 450.894 | 450.885E | --- | --- | 29 |
| 30 | --- | | 450.877 | 451.785 | 451.884 | 451.632 | 451.426 | 450.972 | 450.892 | 450.883E | --- | --- | 30 |
| 31 | --- | | 450.888 | | 451.882 | | 451.426 | 450.982 | | 450.881 | | --- | 31 |
| MEAN | --- | --- | --- | 451.332 | 451.736 | 451.657 | 451.529 | 451.198 | 450.941 | 450.751 | --- | --- | MEAN |
| MAX | --- | --- | --- | 451.842 | 451.782 | 451.684 | 451.628 | 451.418 | 450.978 | 450.888 | --- | --- | MAX |
| MIN | --- | --- | --- | 450.686 | 451.682 | 451.620 | 451.426 | 450.982 | 450.892 | 450.680 | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MAXIMUM DAILY, 451.842 ON APR 16

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 13 30 N
LONG 99 57 03 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1988

DRAINAGE AREA,
184 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

REMARKS - PRIOR TO 1988 PUBLISHED AS "PILOT MOUND RESERVOIR"

## GRACE LAKE NEAR THE PAS - STATION NO. 05KJ002

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 260.081 | 260.080A | 260.081 | 259.867 | 259.878 | 260.028 | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 260.084 | 260.083 | 260.048 | 259.891 | 259.878 | 260.018 | --- | --- | 2 |
| 3 | --- | --- | --- | --- | 260.074 | 260.083 | 260.048 | 259.885 | 259.878 | 260.018 | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 260.078 | 260.047 | 260.051 | 259.882 | 259.880 | 260.020 | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 260.078 | 260.041 | 260.051 | 259.880 | 259.880 | 260.014 | --- | --- | 5 |
| 6 | --- | --- | --- | 260.088A | 260.073 | 260.033 | 260.043 | 259.883 | 259.887 | 260.015 | --- | --- | 6 |
| 7 | --- | --- | --- | 260.084 | 260.075 | 260.024 | 260.037 | 259.878 | 259.892 | 260.017 | --- | --- | 7 |
| 8 | --- | --- | --- | 260.082 | 260.074 | 260.018 | 260.036 | 259.877 | 260.014 | 260.017 | --- | --- | 8 |
| 9 | --- | --- | --- | 260.080 | 260.074 | 260.008 | 260.051 | 259.874 | 260.024 | 260.015 | --- | --- | 9 |
| 10 | --- | --- | --- | 260.080 | 260.078 | 260.003 | 260.050 | 259.875 | 260.027 | 260.018 | --- | --- | 10 |
| 11 | --- | --- | --- | 260.080 | 260.072 | 259.998 | 260.048 | 259.875 | 260.032 | 260.021 | --- | --- | 11 |
| 12 | --- | --- | --- | 260.080 | 260.067 | 259.993 | 260.054 | 259.870 | 260.028 | 260.025 | --- | --- | 12 |
| 13 | --- | --- | --- | 260.080 | 260.061 | 259.981 | 260.053 | 259.884 | 260.031 | 260.029 | --- | --- | 13 |
| 14 | --- | --- | --- | 260.060 | 260.059 | 259.976 | 260.053 | 259.956 | 260.034 | 260.031 | --- | --- | 14 |
| 15 | --- | --- | --- | 260.083 | 260.054 | 259.972 | 260.050 | 259.956 | 260.032 | 260.028 | --- | --- | 15 |
| 16 | --- | --- | --- | 260.081 | 260.056 | 259.971 | 260.048 | 259.954 | 260.038 | 260.026 | --- | --- | 16 |
| 17 | --- | --- | --- | 260.081 | 260.058 | 259.978 | 260.048 | 259.949 | 260.034 | 260.020 | --- | --- | 17 |
| 18 | --- | --- | --- | 260.058 | 260.056 | 259.978 | 260.040 | 259.944 | 260.038 | 260.018 | --- | --- | 18 |
| 19 | --- | --- | --- | 260.058 | 260.057 | 259.984 | 260.038 | 259.945 | 260.035 | 260.018 | --- | --- | 19 |
| 20 | --- | --- | --- | 260.058 | 260.061 | 259.973 | 260.034 | 259.934 | 260.031 | 260.025 | --- | --- | 20 |
| 21 | --- | --- | --- | 260.055 | 260.063 | 259.989 | 260.031 | 259.933 | 260.028 | 260.025 | --- | --- | 21 |
| 22 | --- | --- | 260.036A | 260.055 | 260.067 | 259.971 | 260.018 | 259.938 | 260.028 | 260.024 | --- | --- | 22 |
| 23 | --- | --- | --- | 260.058 | 260.065 | 259.976 | 260.011 | 259.940 | 260.026 | 260.024 | --- | --- | 23 |
| 24 | --- | --- | --- | 260.058 | 260.058 | 259.998 | 260.006 | 259.935 | 260.020 | 260.027 | --- | --- | 24 |
| 25 | --- | --- | --- | 260.055 | 260.074 | 260.010 | 259.998 | 259.946 | 260.022 | 260.022 | --- | --- | 25 |
| 26 | --- | --- | --- | 260.050 | 260.070 | 260.048 | 259.991 | 259.971 | 260.024 | 260.025 | --- | --- | 26 |
| 27 | --- | --- | --- | 260.050 | 260.067 | 260.055 | 259.990 | 259.973 | 260.022 | 260.041 | --- | --- | 27 |
| 28 | --- | --- | --- | 260.049 | 260.055E | 260.055 | 259.987 | 259.975 | 260.015 | 260.042 | --- | --- | 28 |
| 29 | --- | | --- | 260.048 | 260.055E | 260.084 | 259.988 | 259.961 | 260.023 | 260.044 | --- | --- | 29 |
| 30 | --- | | --- | 260.045 | 260.064E | 260.084 | 259.986 | 259.960 | 260.032 | 260.047 | --- | --- | 30 |
| 31 | --- | | --- | | 260.063E | | 259.990 | 259.979 | | 260.049 | | --- | 31 |
| MEAN | --- | --- | --- | --- | 260.068 | 260.013 | 260.030 | 259.888 | 260.017 | 260.028 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 260.078 | 260.088 | 260.081 | 259.992 | 260.038 | 260.049 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 260.061 | 259.969 | 259.986 | 259.933 | 259.878 | 260.014 | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MAXIMUM DAILY, 260.078 ON MAY 4
MINIMUM DAILY, 259.933 ON AUG 31
MAXIMUM INSTANTANEOUS,
260.102 AT 11:14 CST ON MAY 4

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1974 ADJ.)

TYPE OF GAUGE - RECORDING
LOCATION - LAT 53 49 00 N
LONG 101 12 00 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED SINCE 1965

DRAINAGE AREA,
28.5 km²

## GRAHAM CREEK NEAR MELITA - STATION NO. 05MF006

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0.020B | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0.345B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 1.40 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 1.96 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 2.73 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 3.00 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 1.95 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.886 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.528 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.382 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.248 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.185 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.134 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.180 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.291 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.198 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.110 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.069 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.044 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.024 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.010 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.006 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 12.899 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.433 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 3.73 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.053
MAXIMUM DAILY, 3.73 ON APR 5
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
3.84 AT 05:55 CST ON APR 5

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 15 50 N
LONG 100 55 45 W

DRAINAGE AREA, 730 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 1 120 | OCT | 0 |
| MAY | 0.08 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, 1 120 dam³

## GRANVILLE LAKE AT GRANVILLE LAKE - STATION NO. 05ED003

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 289.448E | 289.378 | 289.395 | 289.462 | 289.381 | 280.073 | 280.181 | --- | --- | 289.838 | 289.868 | 289.805 | 1 |
| 2 | 289.443E | 289.377 | 289.387 | 289.480 | 289.367 | 280.083 | 280.170 | --- | --- | 289.832 | 289.880 | 289.899 | 2 |
| 3 | 289.442A | 289.377 | 289.403 | 289.458 | 289.378 | 280.091 | 280.177 | --- | --- | 289.830 | 289.888 | 289.808 | 3 |
| 4 | 289.443 | 289.377 | 289.412 | 289.455 | 289.383 | 280.099 | 280.178 | --- | --- | 289.827 | 289.873 | 289.808 | 4 |
| 5 | 289.442 | 289.383 | 289.411 | 289.480 | 289.400 | 280.110 | 280.183 | --- | --- | 289.897 | 289.889 | 289.897 | 5 |
| 6 | 289.435 | 289.380 | 289.422 | 289.443 | 289.420 | 280.117 | 280.178 | --- | --- | 289.905 | 289.889 | 289.894 | 6 |
| 7 | 289.432 | 289.373 | 289.425 | 289.462 | 289.441 | 280.117 | 280.172 | --- | --- | 289.818 | 289.880 | 289.892 | 7 |
| 8 | 289.428 | 289.370 | 289.428 | 289.434 | 289.455 | 280.121 | 280.174 | --- | --- | 289.813 | 289.872 | 289.880 | 8 |
| 9 | 289.426 | 289.375 | 289.434 | 289.428 | 289.491 | 280.131 | 280.168 | --- | --- | 289.809 | 289.878 | 289.891 | 9 |
| 10 | 289.426 | 289.378 | 289.438 | 289.427 | 289.824 | 280.130 | 280.185 | --- | --- | 289.814 | 289.878 | 289.892 | 10 |
| 11 | 289.426 | 289.378 | 289.433 | 289.422 | 289.558 | 280.143 | 280.181 | --- | --- | 289.801 | 289.870 | 289.893 | 11 |
| 12 | 289.428 | 289.381 | 289.438 | 289.418 | 289.584 | 280.144 | 280.185 | --- | --- | 289.886 | 289.863 | 289.893 | 12 |
| 13 | 289.428 | 289.377 | 289.437 | 289.413 | 289.609 | 280.144 | 280.183 | --- | --- | 289.812 | 289.856 | 289.895 | 13 |
| 14 | 289.420 | 289.388 | 289.430 | 289.404 | 289.632 | 280.142 | 280.148 | --- | --- | 289.811 | 289.848 | 289.896 | 14 |
| 15 | 289.417 | 289.388 | 289.433 | 289.403 | 289.653 | 280.136 | 280.147 | --- | --- | 289.812 | 289.844 | 289.907 | 15 |
| 16 | 289.416 | 289.372 | 289.434 | 289.394 | 289.709 | 280.133 | 280.138 | --- | --- | 289.806 | 289.840 | 289.907 | 16 |
| 17 | 289.412 | 289.370 | 289.437 | 289.388 | 289.742 | 280.146 | 280.138 | --- | --- | 289.802 | 289.834 | 289.908 | 17 |
| 18 | 289.413 | 289.375 | 289.440 | 289.378 | 289.758 | 280.138 | 280.134 | --- | --- | 289.890 | 289.828 | 289.908 | 18 |
| 19 | 289.411 | 289.378 | 289.441 | 289.373 | 289.780 | 280.140 | 280.130 | --- | --- | 289.882 | 289.828 | 289.910 | 19 |
| 20 | 289.418 | 289.377 | 289.441 | 289.367 | 289.824 | 280.133 | 280.127 | --- | --- | 289.802 | 289.825 | 289.907A | 20 |
| 21 | 289.420 | 289.378 | 289.448 | 289.388 | 289.851 | 280.118 | 280.121 | --- | --- | 289.805 | 289.830 | --- | 21 |
| 22 | 289.417 | 289.376 | 289.450 | 289.373 | 289.885 | 280.122 | 280.113 | --- | --- | 289.809 | 289.817 | --- | 22 |
| 23 | 289.412 | 289.367 | 289.458 | 289.378 | 289.907 | 280.118 | 280.101 | --- | --- | 289.803 | 289.810 | --- | 23 |
| 24 | 289.411 | 289.380 | 289.459 | 289.377 | 289.931 | 280.128 | 280.123 | --- | --- | 289.818 | 289.807 | --- | 24 |
| 25 | 289.412 | 289.389 | 289.480 | 289.372 | 289.950 | 280.129 | 280.143 | --- | --- | 289.810 | 289.803 | --- | 25 |
| 26 | 289.411 | 289.388 | 289.480 | 289.388 | 289.988 | 280.126 | 280.183A | --- | 289.881A | 289.821 | 289.888 | --- | 26 |
| 27 | 289.408 | 289.385 | 289.487 | 289.380 | 289.989 | 280.143 | --- | --- | 289.849 | 289.828 | 289.882 | --- | 27 |
| 28 | 289.403 | 289.385 | 289.481 | 289.359 | 290.009 | 280.144 | --- | --- | 289.853 | 289.885 | 289.884 | --- | 28 |
| 29 | 289.405 | | 289.458 | 289.367 | 290.028 | 280.148 | --- | --- | 289.873 | 289.881 | 289.800 | --- | 29 |
| 30 | 289.382 | | 289.480 | 289.386 | 290.048 | 280.158 | --- | --- | 289.888 | 289.888 | 289.895 | --- | 30 |
| 31 | 289.382 | | 289.482 | | 290.068 | | --- | --- | | 289.887 | | --- | 31 |
| MEAN | 289.420 | 289.378 | 289.437 | 289.403 | 289.701 | 280.127 | --- | --- | --- | 289.818 | 289.838 | --- | MEAN |
| MAX | 289.448 | 289.385 | 289.482 | 289.462 | 290.068 | 280.158 | --- | --- | --- | 289.888 | 289.880 | --- | MAX |
| MIN | 289.382 | 289.388 | 289.388 | 289.388 | 289.381 | 280.073 | --- | --- | --- | 289.890 | 289.892 | --- | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MINIMUM DAILY, 289.388 ON APR 30

TYPE OF GAUGE - RECORDING
LOCATION - LAT 55 13 40 N
LONG 100 38 00 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED SINCE 1933

DRAINAGE AREA,
244 000 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (MAN. HYDRO EXT.)

REMARKS - PREVIOUS TO 1988 PUBLISHED UNDER THE NAME "GRANVILLE LAKE AT PICKEREL NARROWS"

## GRASS RIVER ABOVE STANDING STONE FALLS - STATION NO. 05TD001

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 25.2 | 22.8E | 20.2E | 17.5 | 16.0 | 26.1 | --- | --- | --- | 12.5E | --- | --- | 1 |
| 2 | 24.9 | 22.8E | 20.1E | 17.4 | 16.2 | 26.8 | --- | --- | --- | 12.4A | --- | --- | 2 |
| 3 | 24.8 | 22.4E | 20.0E | 17.4 | 16.7 | 26.8 | --- | --- | --- | 12.4E | --- | --- | 3 |
| 4 | 24.7 | 22.4E | 19.9E | 17.3 | 19.1 | 27.0 | --- | --- | --- | 12.4E | --- | --- | 4 |
| 5 | 24.5 | 22.3E | 19.7E | 17.2 | 19.5 | 26.1 | --- | --- | --- | 12.4E | --- | --- | 5 |
| 6 | 24.5 | 22.2E | 19.6E | 17.2 | 18.9 | 25.1 | --- | --- | --- | 12.5E | --- | --- | 6 |
| 7 | 24.3 | 22.0E | 19.6E | 17.1 | 20.2 | 25.4 | --- | --- | --- | 12.5E | --- | --- | 7 |
| 8 | 24.1 | 21.9E | 19.5E | 17.0 | 20.7 | 25.3 | --- | --- | --- | 12.5E | --- | --- | 8 |
| 9 | 24.2A | 21.8E | 19.4E | 16.9 | 21.1 | 25.0 | --- | --- | --- | 12.5E | --- | --- | 9 |
| 10 | 24.2E | 21.7E | 19.3E | 16.8 | 21.9 | 23.2 | --- | --- | --- | 12.6E | --- | --- | 10 |
| 11 | 24.1E | 21.6E | 19.1E | 16.5 | 22.6 | 22.5 | --- | --- | --- | 12.6A | --- | --- | 11 |
| 12 | 24.0E | 21.5E | 19.1E | 16.6 | 23.6 | 22.9 | --- | --- | --- | --- | --- | --- | 12 |
| 13 | 23.9E | 21.5E | 19.0E | 16.7 | 23.8 | 24.7 | --- | --- | --- | --- | --- | --- | 13 |
| 14 | 23.8E | 21.4E | 19.0E | 16.7 | 23.4 | 25.3 | --- | --- | --- | --- | --- | --- | 14 |
| 15 | 23.8E | 21.3E | 18.9E | 16.3 | 25.1 | 25.0A | --- | --- | --- | --- | --- | --- | 15 |
| 16 | 23.8E | 21.3E | 18.8E | 16.2 | 23.6 | --- | --- | --- | --- | --- | --- | --- | 16 |
| 17 | 23.7E | 21.2E | 18.7E | 16.2 | 24.8 | --- | --- | --- | --- | --- | --- | --- | 17 |
| 18 | 23.6E | 21.1E | 18.6E | 16.3 | 25.6 | --- | --- | --- | --- | --- | --- | --- | 18 |
| 19 | 23.5E | 21.0E | 18.5E | 16.2 | 22.1 | --- | --- | --- | --- | --- | --- | --- | 19 |
| 20 | 23.4E | 20.9E | 18.4E | 16.0 | 23.3 | --- | --- | --- | --- | --- | --- | --- | 20 |
| 21 | 23.4E | 20.7E | 18.4E | 15.7 | 25.7 | --- | --- | --- | --- | --- | --- | --- | 21 |
| 22 | 23.4E | 20.7E | 18.4E | 15.6 | 26.6 | --- | --- | --- | --- | --- | --- | --- | 22 |
| 23 | 23.3E | 20.6E | 18.3E | 16.5 | 26.5 | --- | --- | --- | --- | --- | --- | --- | 23 |
| 24 | 23.2E | 20.5E | 18.2E | 17.1 | 26.6 | --- | --- | --- | --- | --- | --- | --- | 24 |
| 25 | 23.1E | 20.4E | 18.1E | 17.1 | 24.0 | --- | --- | --- | 12.9A | --- | --- | --- | 25 |
| 26 | 23.0E | 20.4E | 18.0E | 17.1 | 26.5 | --- | --- | --- | 12.9E | --- | --- | --- | 26 |
| 27 | 22.9A | 20.3E | 17.8E | 17.2 | 25.0 | --- | --- | --- | 12.9E | --- | --- | --- | 27 |
| 28 | 22.8E | 20.3E | 17.8E | 17.3 | 27.3 | --- | --- | --- | 12.9E | --- | --- | --- | 28 |
| 29 | 22.8E | | 17.7A | 17.4 | 26.5 | --- | --- | --- | 12.8E | --- | --- | --- | 29 |
| 30 | 22.7E | | 17.6 | 17.6 | 27.2 | --- | --- | --- | 12.5E | --- | --- | --- | 30 |
| 31 | 22.6E | | 17.7 | | 26.5 | | --- | --- | | --- | | --- | 31 |
| TOTAL | 738.2 | 599.5 | 583.4 | 504.2 | 736.5 | --- | --- | --- | --- | --- | --- | --- | TOTAL |
| MEAN | 23.7 | 21.4 | 18.8 | 16.8 | 23.8 | --- | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | 25.2 | 22.8 | 20.2 | 17.6 | 26.6 | --- | --- | --- | --- | --- | --- | --- | MAX |
| MIN | 22.6 | 20.3 | 17.6 | 15.7 | 16.0 | --- | --- | --- | --- | --- | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1988

DISCHARGES IN CUBIC METRES PER SECOND

MAXIMUM DAILY, 28.6 ON MAY 29

MAXIMUM INSTANTANEOUS,
31.9 AT 13:00 CST ON MAY 28

TYPE OF GAUGE - RECORDING
LOCATION - LAT 55 44 35 N
LONG 97 00 00 W
DRAINAGE AREA, 15 400 km²
A - MANUAL GAUGE

E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 83 600 | JUL | --- |
| FEB | 61 700 | AUG | --- |
| MAR | 50 400 | SEP | --- |
| APR | 43 500 | OCT | --- |
| MAY | 83 500 | NOV | --- |
| JUN | --- | DEC | --- |

## GRASS RIVER AT WEKUSKO FALLS - STATION NO. 05TB002

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.88 | 1.81 | 1.81 | 1.91 | 1.85 | 1.98 | 2.01 | 1.40 | 1.21 | 1.88 | 2.77 | 3.78 | 1 |
| 2 | 1.87 | 1.82 | 1.82 | 1.88 | 1.81 | 2.22 | 2.17 | 1.30 | 1.20 | 2.26 | 2.78 | 3.83 | 2 |
| 3 | 2.04 | 1.85 | 1.86 | 1.98 | 1.79 | 1.98 | 1.78 | 1.33 | 1.19 | 2.41 | 2.78 | 3.83 | 3 |
| 4 | 2.02 | 1.85 | 1.83 | 1.85 | 1.80 | 2.12 | 2.03 | 1.15 | 1.38 | 2.38 | 2.80 | 4.00 | 4 |
| 5 | 2.06 | 2.01 | 1.77 | 1.85 | 1.73 | 2.18 | 1.84 | 1.38 | 1.37 | 2.24 | 2.88 | 3.88 | 5 |
| 6 | 1.88 | 2.02 | 1.73 | 1.91 | 1.82 | 1.98 | 2.07 | 1.43 | 1.17 | 2.13 | 2.88 | 3.81 | 6 |
| 7 | 1.82 | 1.83 | 1.83 | 1.88 | 1.81 | 2.07 | 2.08 | 1.38 | 1.60 | 2.23 | 3.04 | 3.76 | 7 |
| 8 | 1.85 | 1.84 | 1.80 | 1.88 | 1.77 | 2.37 | 1.81 | 1.35 | 1.67 | 2.33 | 2.92 | 3.67 | 8 |
| 9 | 1.88 | 1.88 | 1.88 | 1.90 | 1.87 | 2.04 | 1.84 | 1.28 | 1.80 | 2.27 | 2.98 | 3.73 | 9 |
| 10 | 1.84 | 2.02 | 1.77 | 1.87 | 1.85 | 1.84 | 1.82 | 1.27 | 1.73 | 2.35 | 3.07 | 3.70 | 10 |
| 11 | 2.01 | 1.86 | 1.77 | 1.85 | 1.83 | 1.98 | 2.00 | 1.28 | 1.88 | 2.47 | 3.17 | 3.85 | 11 |
| 12 | 2.05 | 2.00 | 1.87 | 1.83 | 1.89 | 1.85 | 1.88 | 0.895 | 2.31 | 2.32 | 3.11 | 3.88 | 12 |
| 13 | 2.11 | 1.93 | 1.88 | 1.85 | 1.77 | 1.82 | 1.88 | 1.04 | 2.05 | 2.28 | 3.12 | 3.88 | 13 |
| 14 | 2.04 | 1.87 | 1.86 | 1.83 | 1.84 | 1.92 | 2.05 | 1.21 | 2.08 | 2.18 | 3.13 | 3.85 | 14 |
| 15 | 1.84 | 1.90 | 1.83 | 1.80 | 1.85 | 1.84 | 1.84 | 1.18 | 2.03 | 2.17 | 3.18 | 3.80 | 15 |
| 16 | 1.88 | 1.83 | 1.86 | 1.82 | 1.78 | 1.84 | 1.89 | 1.20 | 2.03 | 2.18 | 3.18 | 3.88 | 16 |
| 17 | 1.84 | 1.87 | 1.85 | 1.85 | 2.04 | 1.83 | 1.84 | 1.13 | 2.14 | 2.38 | 3.20 | 3.84 | 17 |
| 18 | 2.06 | 1.88 | 1.88 | 1.83 | 2.17 | 1.88 | 1.88 | 0.882 | 2.08 | 2.81 | 3.19 | 3.83 | 18 |
| 19 | 2.01 | 1.84 | 1.89 | 1.77 | 1.78 | 1.80 | 2.07 | 0.878 | 2.22 | 2.48 | 3.37 | 3.88 | 19 |
| 20 | 2.02 | 1.83 | 1.87 | 1.78 | 2.24 | 2.00 | 1.88 | 1.30 | 2.23 | 2.22 | 3.43 | 3.83 | 20 |
| 21 | 2.07 | 1.87 | 1.85 | 1.77 | 2.54 | 1.78 | 2.16 | 1.13 | 2.31 | 2.30 | 3.44 | 3.84 | 21 |
| 22 | 2.01 | 1.88 | 1.87 | 1.85 | 2.41 | 1.88 | 2.07 | 0.917 | 2.31 | 2.24 | 3.48 | 3.82 | 22 |
| 23 | 2.04 | 1.88 | 1.90 | 1.82 | 2.28 | 1.84 | 1.88 | 0.853 | 2.84 | 2.32 | 3.41 | 3.83 | 23 |
| 24 | 2.01 | 1.84 | 1.80 | 1.80 | 2.38 | 1.48 | 1.77 | 1.04 | 2.38 | 2.25 | 3.38 | 3.81 | 24 |
| 25 | 2.08 | 1.88 | 1.80 | 1.78 | 1.83 | 1.38 | 1.88 | 1.08 | 2.31 | 2.81 | 3.48 | 3.88 | 25 |
| 26 | 2.15 | 1.85 | 1.80 | 1.70 | 2.32 | 1.38 | 1.41 | 1.30 | 2.48 | 2.20 | 3.53 | 3.73 | 26 |
| 27 | 2.18 | 1.88 | 1.80 | 1.78 | 2.28 | 1.88 | 1.48 | 1.38 | 2.48 | 1.88 | 3.88 | 3.78 | 27 |
| 28 | 2.08 | 1.83 | 1.78 | 1.88 | 2.33 | 1.87 | 1.48 | 1.18 | 2.30 | 2.88 | 3.53 | 3.78 | 28 |
| 29 | 2.15 | | 1.87 | 1.88 | 2.82 | 1.81 | 1.43 | 1.32 | 2.27 | 2.88 | 3.88 | 3.88 | 29 |
| 30 | 1.89 | | 1.88 | 1.83 | 2.20 | 1.88 | 1.43 | 1.24 | 1.74 | 2.84 | 3.58 | 3.88 | 30 |
| 31 | 1.84 | | 1.84 | | 2.48 | | 1.38 | 1.25 | | 2.67 | | 3.84 | 31 |
| TOTAL | 62.71 | 53.88 | 57.13 | 55.44 | 61.88 | 54.88 | 57.80 | 37.278 | 68.37 | 72.78 | 95.83 | 114.88 | TOTAL |
| MEAN | 2.02 | 1.92 | 1.84 | 1.85 | 2.00 | 1.83 | 1.87 | 1.20 | 1.85 | 2.35 | 3.20 | 3.70 | MEAN |
| MAX | 2.18 | 2.02 | 1.84 | 1.98 | 2.82 | 2.27 | 2.18 | 1.43 | 2.84 | 2.88 | 3.88 | 4.00 | MAX |
| MIN | 1.82 | 1.83 | 1.73 | 1.88 | 1.80 | 1.38 | 1.38 | 0.917 | 1.17 | 1.88 | 2.78 | 3.82 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 2.15
MAXIMUM DAILY, 4.00 ON DEC 4
MINIMUM DAILY, 0.917 ON AUG 22
MAXIMUM INSTANTANEOUS,
4.08 AT 18:34 CST ON DEC 4

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 54 47 20 N
LONG 98 58 10 W
DRAINAGE AREA, 3 250 km²

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 5 420 | JUL | 5 000 |
| FEB | 4 880 | AUG | 3 220 |
| MAR | 4 940 | SEP | 5 040 |
| APR | 4 790 | OCT | 6 280 |
| MAY | 5 380 | NOV | 8 280 |
| JUN | 4 740 | DEC | 9 910 |

TOTAL DISCHARGE, 67 700 dam³

## GRASSMERE CREEK DRAIN NEAR MIDDLECHURCH - STATION NO. 05OJ017

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.011E | 0 | 0.015 | 0 E | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.010E | 0 | 0.014 | 0 E | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0.009E | 0 | 0.014 | 0 E | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 0.008E | 0 | 0.014 | 0 A | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 B | 0.008E | 0 | 0.014 | 0 E | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0 B | 0.005E | 0 | 0.010 | 0 A | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0 B | 0.004E | 0.005 | 0.008 | 0 E | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0 B | 0.003E | 0.007 | 0.005 | 0 A | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0 B | 0.002E | 0.005 | 0.005 | 0 A | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0 B | 0.001A | 0.003 | 0.005 | 0 A | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.020B | 0.001 | 0.002 | 0.004 | 0 E | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.478B | 0 | 0.020 | 0.001 | 0 A | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 1.05 B | 0 | 0.438A | 0.004 | 0 A | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 5.60 B | 0 | 0.448A | 0.001 | 0 E | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 5.94 B | 0 | 0.068 | 0.001 | 0 E | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 5.60 B | 0 | 0.035 | 0 | 0 A | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 3.45 B | 0 | 0.023 | 0 | 0 A | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 2.44 B | 0 A | 0.018 | 0 | 0 A | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 2.40 B | 0 E | 0.018 | 0 | 0 A | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 2.65 B | 0 E | 0.011 | 0 | 0.004A | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 2.93 B | 0 E | 0.007 | 0 | 0.007A | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 1.88 B | 0 E | 0.008 | 0 | 0.008 | 0A | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 1.35 B | 0 E | 0.008 | 0 | 0.001 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.880E | 0 E | 0.007 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.450E | 0 E | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.068A | 0 E | 0.013 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.038 | 0 E | 0.012 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.044A | 0 E | 0.014 | 0 A | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.018E | 0 E | 0.018 | 0 A | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.012E | 0 E | 0.018 | 0 A | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0 A | | 0 E | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 38.884 | 0.080 | 1.207 | 0.130 | 0.017 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 1.30 | 0.002 | 0.040 | 0.004 | 0.001 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 5.94 | 0.011 | 0.448 | 0.018 | 0.007 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.184
MAXIMUM DAILY, 5.94B ON APR 15
MINIMUM DAILY, 0B ON MAR 1

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 00 08 N
LONG 97 07 01 W
DRAINAGE AREA, 471 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 11.3 |
| FEB | --- | AUG | 1.47 |
| MAR | 0 | SEP | 0 |
| APR | 3 360 | OCT | 0 |
| MAY | 5.18 | NOV | --- |
| JUN | 104 | DEC | --- |

TOTAL DISCHARGE, 3 480 dam³

REMARKS - PREVIOUS TO 1988 PUBLISHED UNDER THE NAME "GRASSMERE DRAIN NEAR MIDDLECHURCH"

## GULL LAKE AT SHERWOOD - STATION NO. 05SA001

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | --- | 283.227E | 283.218E | 283.105E | 283.058 | 282.870E | --- | --- | 1 |
| 2 | --- | --- | --- | --- | --- | 283.224 | 283.215 | 283.103 | 283.055E | 282.870 | --- | --- | 2 |
| 3 | --- | --- | --- | --- | --- | 283.223E | 283.212E | 283.100E | 283.053E | 282.868E | --- | --- | 3 |
| 4 | --- | --- | --- | --- | --- | 283.221 | 283.208 | 283.113 | 283.052 | 282.868E | --- | --- | 4 |
| 5 | --- | --- | --- | --- | --- | 283.219 | 283.211E | 283.112E | 283.048E | 282.867E | --- | --- | 5 |
| 6 | --- | --- | --- | --- | --- | 283.223E | 283.212 | 283.111E | 283.045E | 282.868E | --- | --- | 6 |
| 7 | --- | --- | 283.120 | --- | --- | 283.227 | 283.205E | 283.110 | 283.041 | 282.864E | --- | --- | 7 |
| 8 | --- | --- | --- | --- | --- | 283.223E | 283.198E | 283.107E | 283.037E | 282.863E | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 283.208 | 283.218 | 283.192 | 283.103 | 283.033 | 282.862 | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 283.208E | 283.224E | 283.188E | 283.100E | 283.028 | 282.862E | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 283.207 | 283.230E | 283.186E | 283.098E | 283.028E | 282.862E | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 283.203E | 283.236 | 283.182E | 283.095 | 283.023 | 282.862 | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 283.198 | 283.245E | 283.178E | 283.090E | 283.018E | 282.862E | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 283.196E | 283.263 | 283.178 | 283.085E | 283.015E | 282.862 | --- | --- | 14 |
| 15 | --- | --- | --- | --- | 283.196E | 283.268E | 283.175 | 283.080 | 283.011 | 282.867E | --- | --- | 15 |
| 16 | --- | --- | --- | --- | 283.198E | 283.268 | 283.168 | 283.082E | 283.010E | 282.872 | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 283.183E | 283.268E | 283.162E | 283.084E | 283.008 | 282.872E | --- | --- | 17 |
| 18 | --- | --- | --- | --- | 283.182 | 283.268E | 283.167E | 283.088 | 283.002E | 282.872 | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 283.187 | 283.263 | 283.161 | 283.088 | 282.995 | 282.872E | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 283.178 | 283.260E | 283.148 | 283.086 | 282.984E | 282.872E | --- | --- | 20 |
| 21 | --- | --- | --- | --- | 283.167E | 283.247 | 283.143E | 283.085E | 282.982E | 282.872E | --- | --- | 21 |
| 22 | --- | --- | --- | --- | 283.184 | 283.243E | 283.138E | 283.084 | 282.981 | 282.872 | --- | --- | 22 |
| 23 | --- | --- | --- | --- | 283.203E | 283.238 | 283.134E | 283.081E | 282.988E | 282.867E | --- | --- | 23 |
| 24 | --- | --- | --- | --- | 283.212E | 283.238E | 283.129E | 283.077E | 282.988E | 282.862 | --- | --- | 24 |
| 25 | --- | --- | --- | --- | 283.221 | 283.233E | 283.124 | 283.074 | 282.983E | 282.862E | --- | --- | 25 |
| 26 | --- | --- | --- | --- | 283.234 | 283.230 | 283.118E | 283.072E | 282.980 | 282.862 | --- | --- | 26 |
| 27 | --- | --- | --- | --- | 283.233E | 283.228E | 283.109E | 283.069 | 282.977E | 282.862E | --- | --- | 27 |
| 28 | --- | --- | --- | --- | 283.231E | 283.226 | 283.101 | 283.067E | 282.973E | 282.862 | --- | --- | 28 |
| 29 | --- | | --- | --- | 283.230 | 283.222E | 283.088 | 283.068E | 282.970 | --- | --- | --- | 29 |
| 30 | --- | | --- | --- | 283.230E | 283.217 | 283.110 | 283.064 | 282.970 | --- | --- | --- | 30 |
| 31 | --- | | --- | | 283.229 | | 283.108E | 283.060E | | --- | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | 283.235 | 283.183 | 283.088 | 283.012 | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | 283.268 | 283.218 | 283.113 | 283.058 | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | 283.217 | 283.088 | 283.060 | 282.970 | --- | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - MANUAL
LOCATION - LAT 50 24 56 N
LONG 96 31 06 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

NATURAL FLOW

DRAINAGE AREA,
4.14 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## GUNISAO RIVER ABOVE DIAMOND RAPIDS - STATION NO. 05UA003

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.34 | 2.22 | 2.28 | 2.31 | 3.88 | 5.03 | 3.50 | 0.775 | 2.35 | 3.38 | 7.82 | 3.85 | 1 |
| 2 | 2.25 | 2.12 | 2.31 | 2.34 | 3.77 | 4.81 | 3.01 | 0.722 | 2.10 | 3.61 | 7.39 | 3.88 | 2 |
| 3 | 2.30 | 2.16 | 2.42 | 2.38 | 3.80 | 4.63 | 2.88 | 0.728 | 1.98 | 3.71 | 7.37 | 4.03 | 3 |
| 4 | 2.29 | 2.23 | 2.46 | 2.42 | 3.26 | 4.85 | 2.75 | 1.22 | 1.84 | 3.78 | 7.40 | 4.16 | 4 |
| 5 | 2.30 | 2.38 | 2.38 | 2.38 | 3.08 | 4.48 | 2.84 | 1.87 | 2.09 | 3.87 | 7.30 | 4.08 | 5 |
| 6 | 2.10 | 2.54 | 2.36 | 2.25 | 2.97 | 4.36 | 2.38 | 2.38 | 2.03 | 3.88 | 7.08 | 3.85 | 6 |
| 7 | 1.92 | 2.31 | 2.48 | 2.23 | 2.83 | 4.13 | 2.28 | 2.70 | 2.03 | 3.86 | 7.08 | 3.81 | 7 |
| 8 | 1.85 | 2.08 | 2.60 | 2.23 | 2.91 | 4.03 | 2.05 | 2.74 | 2.12 | 3.73 | 6.83 | 3.77 | 8 |
| 9 | 1.88 | 2.32 | 2.59 | 2.18 | 2.85 | 3.91 | 1.94 | 2.62 | 2.21 | 3.92 | 6.70 | 3.87 | 9 |
| 10 | 2.01 | 2.44 | 2.58 | 2.26 | 2.88 | 3.81 | 1.94 | 2.42 | 2.44 | 4.01 | 6.53 | 3.88 | 10 |
| 11 | 2.28 | 2.50 | 2.30 | 2.18 | 2.87 | 3.71 | 1.88 | 2.16 | 2.58 | 4.41 | 6.48 | 3.48 | 11 |
| 12 | 2.48 | 2.50 | 2.38 | 2.10 | 2.87 | 3.85 | 1.92 | 1.83 | 2.86 | 4.87 | 6.33 | 3.25 | 12 |
| 13 | 2.62 | 2.40 | 2.55 | 2.18 | 2.50 | 3.88 | 1.80 | 1.44 | 3.01 | 4.89 | 6.11 | 3.18 | 13 |
| 14 | 2.57 | 2.28 | 2.42 | 2.23 | 2.29 | 3.60 | 1.89 | 1.28 | 2.95 | 4.78 | 5.83 | 3.14 | 14 |
| 15 | 2.31 | 2.17 | 2.26 | 2.31 | 2.30 | 3.62 | 1.92 | 1.21 | 2.81 | 4.64 | 5.57 | 3.23 | 15 |
| 16 | 2.30 | 2.38 | 2.24 | 2.28 | 2.32 | 3.42 | 1.80 | 1.08 | 2.83 | 4.78 | 5.25 | 3.25 | 16 |
| 17 | 2.26 | 2.54 | 2.23 | 2.17 | 2.32 | 3.11 | 1.88 | 0.880 | 2.89 | 4.88 | 5.18 | 2.85 | 17 |
| 18 | 2.33 | 2.71 | 2.30 | 2.28 | 2.30 | 3.52 | 2.18 | 0.818 | 2.73 | 4.83 | 4.89 | 2.84 | 18 |
| 19 | 2.34 | 2.83 | 2.33 | 2.38 | 2.46 | 3.64 | 2.06 | 0.938 | 2.83 | 4.84 | 5.11 | 2.84 | 19 |
| 20 | 2.28 | 2.68 | 2.08 | 2.41 | 4.28 | 3.48 | 1.92 | 1.24 | 2.81 | 4.89 | 5.02 | 2.80 | 20 |
| 21 | 2.82 | 2.42 | 2.08 | 2.68 | 4.82 | 3.37 | 1.67 | 1.80 | 2.74 | 4.98 | 4.70 | 2.88 | 21 |
| 22 | 2.84 | 2.40 | 2.28 | 3.03 | 4.87 | 3.01 | 1.45 | 1.80 | 2.82 | 4.94 | 4.55 | 2.85 | 22 |
| 23 | 2.40 | 2.84 | 2.21 | 3.41 | 4.52 | 2.84 | 1.18 | 1.82 | 3.03 | 4.92 | 4.34 | 3.12 | 23 |
| 24 | 2.37 | 2.80 | 2.21 | 3.48 | 4.48 | 2.78 | 0.942 | 1.85 | 3.17 | 4.78 | 4.35 | 3.23 | 24 |
| 25 | 2.48 | 2.80 | 2.14 | 3.82 | 4.88 | 3.42 | 0.891 | 1.88 | 3.38 | 4.81 | 4.34 | 3.11 | 25 |
| 26 | 2.70 | 2.38 | 2.18 | 3.73 | 5.25 | 3.77 | 0.875 | 2.28 | 3.42 | 4.87 | 4.28 | 3.02 | 26 |
| 27 | 2.82 | 2.80 | 2.26 | 3.87 | 5.38 | 3.82 | 0.880 | 2.52 | 3.64 | 5.18 | 4.03 | 3.18 | 27 |
| 28 | 2.78 | 2.47 | 2.13 | 3.84 | 5.19 | 3.81 | 0.885 | 2.41 | 3.81 | 5.44 | 3.84 | 3.18 | 28 |
| 29 | 2.77 | | 2.18 | 4.01 | 5.38 | 3.82 | 0.835 | 2.48 | 3.52 | 7.07 | 4.12 | 3.31 | 29 |
| 30 | 2.88 | | 2.30 | 4.03 | 5.59 | 3.89 | 0.888 | 2.85 | 3.53 | 7.48 | 3.88 | 3.78 | 30 |
| 31 | 2.38 | | 2.21 | | 5.34 | | 0.801 | 2.40 | | 7.77 | | 3.88 | 31 |
| TOTAL | 73.58 | 67.27 | 71.61 | 81.27 | 113.83 | 113.81 | 56.147 | 54.422 | 82.63 | 148.01 | 169.88 | 105.88 | TOTAL |
| MEAN | 2.37 | 2.40 | 2.31 | 2.71 | 3.88 | 3.80 | 1.81 | 1.76 | 2.75 | 4.77 | 5.67 | 3.41 | MEAN |
| MAX | 2.82 | 2.71 | 2.60 | 4.03 | 5.59 | 5.03 | 3.50 | 2.74 | 3.84 | 7.77 | 7.82 | 4.16 | MAX |
| MIN | 1.82 | 2.08 | 2.08 | 2.10 | 2.29 | 2.78 | 0.801 | 0.722 | 1.84 | 3.38 | 3.84 | 2.68 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 3.12
MAXIMUM DAILY, 7.82 ON NOV 1
MINIMUM DAILY, 0.722 ON AUG 2
MAXIMUM INSTANTANEOUS,
7.84 AT 19:35 CST ON OCT 31

### SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 53 47 10 N
LONG 97 40 30 W
DRAINAGE AREA, 4 500 km²

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 6 380 | JUL | 4 850 |
| FEB | 5 810 | AUG | 4 700 |
| MAR | 6 180 | SEP | 7 140 |
| APR | 7 020 | OCT | 12 800 |
| MAY | 9 840 | NOV | 14 700 |
| JUN | 9 840 | DEC | 9 150 |

TOTAL DISCHARGE, 93 400 dam³

## HAYES RIVER BELOW GODS RIVER - STATION NO. 05AB001

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1508 | 1238 | 105 B | 96.58 | 96.58 | --- | 384 | --- | --- | --- | 4448 | 2708 | 1 |
| 2 | 1488 | 1228 | 105 B | 96.38 | 99.08 | --- | 380 | --- | --- | 382A | 4418 | 2678 | 2 |
| 3 | 1468 | 1218 | 104 B | 96.78 | 104 B | --- | 378 | --- | --- | 348 | 4388 | 2648 | 3 |
| 4 | 1468 | 1208 | 104 B | 96.58 | 121 B | --- | 371 | --- | --- | 347 | 4288 | 2618 | 4 |
| 5 | 1458 | 1198 | 104 B | 96.58 | 156 B | --- | 365 | --- | --- | 346 | 4158 | 2588 | 5 |
| 6 | 1448 | 1188 | 104 B | 96.58 | 190 B | --- | 384 | --- | --- | 348 | 4078 | 2578 | 6 |
| 7 | 1438 | 1188 | 103 B | 96.58 | 234 B | --- | 387A | --- | --- | 356 | 3988 | 2558 | 7 |
| 8 | 1428 | 1188 | 103 B | 96.58 | 284 B | --- | --- | --- | --- | 359 | 3878 | 2528 | 8 |
| 9 | 1418 | 1168 | 103 B | 96.58 | 347 B | --- | --- | --- | --- | 364 | 3788 | 2488 | 9 |
| 10 | 1408 | 1178 | 102 B | 94.58 | 381 B | --- | --- | --- | --- | 368 | 3728 | 2488 | 10 |
| 11 | 1408 | 1178 | 102 B | 93.88 | 483 B | --- | --- | --- | --- | 371 | 3698 | 2438 | 11 |
| 12 | 1398 | 1168 | 102 B | 93.58 | 543 B | --- | --- | --- | --- | 382 | 3588 | 2428 | 12 |
| 13 | 1368 | 1158 | 101 B | 93.58 | --- | --- | --- | --- | --- | 408 | 3528 | 2408 | 13 |
| 14 | 1388 | 1158 | 101 B | 93.58 | --- | 528A | --- | --- | --- | 444 | 3478 | 2378 | 14 |
| 15 | 1368 | 1148 | 101 B | 93.58 | --- | 515 | --- | --- | --- | 467 | 3438 | 2388 | 15 |
| 16 | 1358 | 1138 | 100 B | 93.58 | --- | 488 | --- | --- | --- | 488 | 3378 | 2348 | 16 |
| 17 | 1338 | 1138 | 100 B | 93.58 | --- | 488 | --- | --- | --- | 483 | 3338 | 2318 | 17 |
| 18 | 1328 | 1128 | 100 B | 93.58 | --- | 471 | --- | --- | --- | 452 | 3288 | 2308 | 18 |
| 19 | 1318 | 1118 | 99.88 | 93.58 | --- | 461 | --- | --- | --- | 451 | 3198 | 2288 | 19 |
| 20 | 1318 | 1118 | 99.08 | 93.58 | --- | 464 | --- | --- | --- | 451 | 3148 | 2278 | 20 |
| 21 | 1318 | 1118 | 98.78 | 93.78 | --- | 448 | --- | --- | --- | 452 | 3108 | 2258 | 21 |
| 22 | 1298 | 1108 | 98.48 | 93.78 | --- | 443 | --- | --- | --- | 452 | 3068 | 2228 | 22 |
| 23 | 1298 | 1108 | 98.08 | 93.98 | --- | 445 | --- | --- | --- | 447 | 3028 | 2198 | 23 |
| 24 | 1278 | 1088 | 97.78 | 93.98 | --- | 443 | --- | --- | --- | 443 | 2988 | 2188 | 24 |
| 25 | 1278 | 1088 | 97.58 | 93.98 | --- | 438 | --- | --- | --- | 440 | 2818 | 2168 | 25 |
| 26 | 1278 | 1088 | 97.18 | 94.18 | --- | 431 | --- | --- | --- | 435 | 2888 | 2158 | 26 |
| 27 | 1268 | 1078 | 97.18 | 94.38 | --- | 417 | --- | --- | --- | 4338 | 2848 | 2138 | 27 |
| 28 | 1288 | 1078 | 97.18 | 94.38 | --- | 408 | --- | --- | --- | 4358 | 2818 | 2128 | 28 |
| 29 | 1268 | | 97.18 | 94.58 | --- | 398 | --- | --- | --- | 4388 | 2778 | 2108 | 29 |
| 30 | 1258 | | 96.78 | 96.58 | --- | 388 | --- | --- | --- | 4438 | 2748 | 2098 | 30 |
| 31 | 1248 | | 96.78 | | --- | | --- | --- | --- | 4488 | | 2088 | 31 |
| TOTAL | 4 185 | 3 204 | 3 118.7 | 2 833.2 | --- | --- | --- | --- | --- | --- | 10 404 | 7 284 | TOTAL |
| MEAN | 135 | 114 | 101 | 94.4 | --- | --- | --- | --- | --- | --- | 347 | 235 | MEAN |
| MAX | 150 | 123 | 105 | 96.5 | --- | --- | --- | --- | --- | --- | 444 | 270 | MAX |
| MIN | 124 | 107 | 96.7 | 93.6 | --- | --- | --- | --- | --- | --- | 274 | 208 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MINIMUM DAILY, 93.58 ON APR 12

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 56 25 55 N
LONG 92 47 19 W
DRAINAGE AREA, 103 000 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 382 000 | JUL | --- |
| FEB | 277 000 | AUG | --- |
| MAR | 288 000 | SEP | --- |
| APR | 245 000 | OCT | --- |
| MAY | --- | NOV | 889 000 |
| JUN | --- | DEC | 630 000 |

## HAYES RIVER BELOW TROUT FALLS - STATION NO. 05AA004

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7.688 | 7.308 | 8.128 | 8.538 | 13.18 | --- | 21.8 | 11.0 | 11.7 | 12.8 | 17.0 | 12.0 B | 1 |
| 2 | 7.638 | 7.348 | 8.168 | 8.578 | 13.58 | --- | 22.1 | 10.7 | 11.8 | 12.7 | 17.0 | 11.9 B | 2 |
| 3 | 7.688 | 7.348 | 8.208 | 8.618 | 13.88 | --- | 22.3 | 10.1 | 11.5 | 12.8 | 16.6 | 11.8 B | 3 |
| 4 | 7.548 | 7.388 | 8.258 | 8.708 | 14.28 | --- | 21.4 | 9.36 | 12.0 | 13.8 | 16.2 | 11.7 B | 4 |
| 5 | 7.508 | 7.388 | 8.298 | 8.748 | 14.68 | --- | 21.8 | 9.13 | 12.2 | 14.2 | 16.08 | 11.6 B | 5 |
| 6 | 7.468 | 7.428 | 8.348 | 8.788 | 15.08 | --- | 21.1 | 8.93 | 12.3 | 14.8 | 15.88 | 11.5 B | 6 |
| 7 | 7.428 | 7.428 | 8.388 | 8.838 | 15.88 | 22.6A | 20.4 | 8.86 | 11.8 | 14.2 | 15.88 | 11.4 B | 7 |
| 8 | 7.388 | 7.468 | 8.428 | 8.828 | 16.98 | 22.3 | 20.8 | 8.47 | 11.8 | 14.3 | 15.68 | 11.3 B | 8 |
| 9 | 7.348 | 7.468 | 8.478 | 8.868 | 18.48 | 22.7 | 20.5 | 8.31 | 11.8 | 14.7 | 15.38 | 11.2 B | 9 |
| 10 | 7.308 | 7.508 | 8.518 | 10.0 B | 18.98 | 21.8 | 19.5 | 8.00 | 11.4 | 14.5 | 15.28 | 11.1 B | 10 |
| 11 | 7.308 | 7.548 | 8.518 | 10.1 B | 17.48 | 21.4 | 19.0 | 8.32 | 11.5 | 14.7 | 15.08 | 11.0 B | 11 |
| 12 | 7.268 | 7.548 | 8.568 | 10.1 B | 17.9 | 20.7 | 19.5 | 8.26 | 11.6 | 15.0 | 14.88 | 10.9 B | 12 |
| 13 | 7.268 | 7.598 | 8.608 | 10.2 B | 18.5 | 22.0 | 19.2 | 8.36 | 14.1 | 15.0 | 14.78 | 10.8 B | 13 |
| 14 | 7.228 | 7.598 | 8.648 | 10.2 B | 18.6A | 23.3 | 18.6 | 7.42 | 14.3 | 14.8 | 14.68 | 10.7 B | 14 |
| 15 | 7.228 | 7.638 | 8.698 | 10.3 B | --- | 24.2 | 18.3 | 7.63 | 13.9 | 14.6 | 14.38 | 10.7 B | 15 |
| 16 | 7.188 | 7.638 | 8.738 | 10.3 B | --- | 24.2 | 17.4 | 7.45 | 13.8 | 14.8 | 14.28 | 10.6 B | 16 |
| 17 | 7.188 | 7.688 | 8.828 | 10.4 B | --- | 24.6 | 17.8 | 7.89 | 13.1 | 14.8 | 14.08 | 10.5 B | 17 |
| 18 | 7.188 | 7.728 | 8.888 | 10.4 B | --- | 23.9 | 17.8 | 7.18 | 13.3 | 15.0 | 13.88 | 10.4 B | 18 |
| 19 | 7.148 | 7.768 | 8.918 | 10.5 B | --- | 23.8 | 17.8 | 6.87 | 13.4 | 15.5 | 13.78 | 10.4 B | 19 |
| 20 | 7.148 | 7.818 | 8.958 | 10.6 B | --- | 23.4 | 17.8 | 6.02 | 13.6 | 15.4 | 13.68 | 10.3 B | 20 |
| 21 | 7.148 | 7.818 | 9.008 | 10.7 B | --- | 23.3 | 16.7 | 6.07 | 13.9 | 15.1 | 13.48 | 10.2 B | 21 |
| 22 | 7.148 | 7.858 | 9.048 | 10.8 B | --- | 23.2 | 16.7 | 6.40 | 15.4 | 15.3 | 13.28 | 10.1 B | 22 |
| 23 | 7.188 | 7.858 | 9.088 | 11.0 B | --- | 23.1 | 16.6 | 6.28 | 14.3 | 15.8 | 13.18 | 10.1 B | 23 |
| 24 | 7.188 | 7.908 | 9.138 | 11.2 B | --- | 22.9 | 16.3 | 6.74 | 15.2 | 15.5 | 12.98 | 10.1 B | 24 |
| 25 | 7.188 | 7.948 | 9.178 | 11.3 B | --- | 22.8 | 14.8 | 7.72 | 16.6 | 15.2 | 12.88 | 9.988 | 25 |
| 26 | 7.228 | 7.988 | 9.288 | 11.6 B | --- | 21.8 | 13.9 | 10.3 | 14.9 | 15.2 | 12.78 | 9.928 | 26 |
| 27 | 7.228 | 8.038 | 9.308 | 11.8 B | --- | 20.9 | 12.4 | 10.9 | 14.7 | 13.7 | 13.58 | 9.888 | 27 |
| 28 | 7.228 | 8.038 | 9.358 | 12.2 F | --- | 21.7 | 12.5 | 10.6 | 15.8 | 13.0 | 13.48 | 9.838 | 28 |
| 29 | 7.268 | | 9.398 | 12.4 B | --- | 21.8 | 12.5 | 11.1 | 15.5 | 16.8 | 12.38 | 9.788 | 29 |
| 30 | 7.268 | | 9.448 | 12.6 B | --- | 22.5 | 12.1 | 11.3 | 14.5 | 17.5 | 12.28 | 9.748 | 30 |
| 31 | 7.308 | | 9.488 | | --- | | 11.4 | 11.7 | | 17.0 | | 9.888 | 31 |
| TOTAL | 226.22 | 213.68 | 272.08 | 316.84 | --- | --- | 548.8 | 272.12 | 401.1 | 480.5 | 430.2 | 331.08 | TOTAL |
| MEAN | 7.30 | 7.64 | 8.78 | 10.6 | --- | --- | 17.8 | 8.78 | 13.4 | 14.9 | 14.3 | 10.7 | MEAN |
| MAX | 7.68 | 8.03 | 9.48 | 12.6 | --- | --- | 22.3 | 11.7 | 15.8 | 17.5 | 17.0 | 12.0 | MAX |
| MIN | 7.14 | 7.30 | 8.12 | 8.52 | --- | --- | 11.4 | 6.02 | 11.4 | 12.7 | 12.2 | 9.88 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MINIMUM DAILY, 6.02 ON AUG 20

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 54 51 23 N
LONG 96 07 12 W
DRAINAGE AREA, 9 180 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 15 800 | JUL | 47 200 |
| FEB | 16 800 | AUG | 23 500 |
| MAR | 23 500 | SEP | 34 700 |
| APR | 27 400 | OCT | 39 800 |
| MAY | --- | NOV | 37 200 |
| JUN | --- | DEC | 28 800 |

## HIDDEN ISLAND COULEE NEAR HANSBORO - STATION NO. 05GA005

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0.0038 | 0.007 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2 | 0 | 0 | 0 | 0.0148 | 0.006 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 3 | 0 | 0 | 0 | 0.0288 | 0.006 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 4 | 0 | 0 | 0 | 0.0718 | 0.004 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 5 | 0 | 0 | 0 | 0.1428 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 6 | 0 | 0 | 0 | 0.2838 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 7 | 0 | 0 | 0 | 0.4258 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 8 | 0 | 0 | 0 | 0.588A | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 9 | 0 | 0 | 0 | 0.368 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 10 | 0 | 0 | 0 | 0.227 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 11 | 0 | 0 | 0 | 0.193 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 12 | 0 | 0 | 0 | 0.170 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 13 | 0 | 0 | 0 | 0.210 | 0.001 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 14 | 0 | 0 | 0 | 0.187 | 0.001 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 15 | 0 | 0 | 0 | 0.102 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| 16 | 0 | 0 | 0 | 0.042 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 17 | 0 | 0 | 0 | 0.054 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 18 | 0 | 0 | 0 | 0.054 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 19 | 0 | 0 | 0 | 0.048 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 20 | 0 | 0 | 0 | 0.038 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| 21 | 0 | 0 | 0 | 0.028 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| 22 | 0 | 0 | 0 | 0.020 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| 23 | 0 | 0 | 0 | 0.023 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| 24 | 0 | 0 | 0 | 0.027 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 25 | 0 | 0 | 0 | 0.023 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 |
| 26 | 0 | 0 | 0 | 0.020 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| 27 | 0 | 0 | 0 | 0.017 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 |
| 28 | 0 | 0 | 0 | 0.012 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| 29 | 0 | | 0 | 0.008 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| 30 | 0 | | 0 | 0.007 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 |
| 31 | 0 | | 0 | | 0 | | 0 | 0 | | 0 | | 0 | 31 |
| TOTAL | 0 | 0 | 0 | 3.399 | 0.058 | 0.007 | 0 | 0 | 0 | 0 | 0 | 0 | TOTAL |
| MEAN | 0 | 0 | 0 | 0.113 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | MEAN |
| MAX | 0 | 0 | 0 | 0.588 | 0.007 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | MAX |
| MIN | 0 | 0 | 0 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.008
MAXIMUM DAILY, 0.588A ON APR 8
MINIMUM DAILY, 0 ON JAN 1

SUMMARY FOR THE YEAR 1989

INTERNATIONAL GAUGING STATION
TYPE OF GAUGE - RECORDING
LOCATION - LAT 48 57 10 N
LONG 89 25 35 W
DRAINAGE AREA, 88.1 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 0 | JUL | 0 |
| FEB | 0 | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 294 | OCT | 0 |
| MAY | 5.01 | NOV | 0 |
| JUN | 0.90 | DEC | 0 |

TOTAL DISCHARGE, 300 dam³

## ICELANDIC RIVER NEAR RIVERTON - STATION NO. 05SC002

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.0518 | 0.1188 | 0.435 | 0.515 | 0.812 | 0.184 | 0.101 | 0.108 | --- | --- | 1 |
| 2 | --- | --- | 0.0388 | 0.1288 | 0.390 | 0.382 | 0.713 | 0.180 | 0.112 | 0.118 | --- | --- | 2 |
| 3 | --- | --- | 0.0228 | 0.4828 | 0.370 | 0.293 | 0.618 | 0.181 | 0.123 | 0.270 | --- | --- | 3 |
| 4 | --- | --- | 0.0178 | 0.5058 | 0.383 | 0.257 | 0.526 | 0.202 | 0.132 | 0.535 | --- | --- | 4 |
| 5 | --- | --- | 0.0188 | 0.4848 | 0.267 | 0.225 | 0.452 | 0.198 | 0.111 | 0.330 | --- | --- | 5 |
| 6 | --- | --- | 0.0258 | 0.7388 | 0.267 | 0.179 | 0.438 | 0.208 | 0.102 | 0.222 | --- | --- | 6 |
| 7 | --- | --- | 0.0428 | 1.21 B | 0.274 | 0.181 | 0.408 | 0.172 | 0.105 | 0.187 | --- | --- | 7 |
| 8 | --- | --- | 0.0488 | 1.14 B | 0.240 | 0.214 | 0.403 | 0.148 | 0.288 | 0.174 | --- | --- | 8 |
| 9 | --- | --- | 0.0658 | 1.37 B | 0.223 | 0.380 | 0.372 | 0.128 | 0.281 | 0.174 | --- | --- | 9 |
| 10 | --- | --- | 0.0728 | 1.10 | 0.238 | 0.381 | 0.344 | 0.151 | 0.217 | 0.178 | --- | --- | 10 |
| 11 | --- | --- | 0.0708 | 0.678 | 0.188 | 0.338 | 0.320 | 0.120 | 0.154 | 0.183 | --- | --- | 11 |
| 12 | --- | --- | 0.0828 | 0.791 | 0.181 | 2.99 | 0.331 | 0.094 | 0.143 | 0.148 | --- | --- | 12 |
| 13 | --- | --- | 0.0888 | 0.848 | 0.184 | 37.4 | 0.334 | 0.081 | 0.133 | 0.148 | --- | --- | 13 |
| 14 | --- | --- | 0.0748 | 1.06 | 0.188 | 40.8 | 0.331 | 0.062 | 0.124 | 0.188 | --- | --- | 14 |
| 15 | --- | --- | 0.0618 | 1.42 | 0.184 | 24.0 | 0.319 | 0.060 | 0.111 | 0.178 | --- | --- | 15 |
| 16 | --- | --- | 0.0608 | 2.28 | 0.188 | 13.7 | 0.300 | 0.038 | 0.108 | 0.170 | --- | --- | 16 |
| 17 | --- | --- | 0.0618 | 2.55 | 0.212 | 7.84 | 0.267 | 0.036 | 0.120 | 0.188 | --- | --- | 17 |
| 18 | --- | --- | 0.0618 | 1.80 | 0.281 | 4.82 | 0.284 | 0.051 | 0.103 | 0.172 | --- | --- | 18 |
| 19 | --- | --- | 0.0618 | 1.87 | 0.237 | 3.03 | 0.198 | 0.078 | 0.101 | 0.200 | --- | --- | 19 |
| 20 | --- | --- | 0.0608 | 2.08 | 0.326 | 2.21 | 0.108 | 0.088 | 0.205 | 0.218 | --- | --- | 20 |
| 21 | --- | --- | 0.0608 | 2.13 | 0.382 | 1.83 | 0.077 | 0.140 | 0.261 | 0.223 | --- | --- | 21 |
| 22 | --- | --- | 0.0588 | 2.33 | 0.432 | 1.30 | 0.078 | 0.158 | 0.181 | 0.228 | --- | --- | 22 |
| 23 | --- | --- | 0.0558 | 2.69 | 0.420 | 0.890 | 0.087 | 0.148 | 0.174 | 0.203 | --- | --- | 23 |
| 24 | --- | --- | 0.0578 | 2.30 | 0.381 | 0.678 | 0.083 | 0.151 | 0.150 | 0.192 | --- | --- | 24 |
| 25 | --- | --- | 0.0608 | 1.42 | 0.518 | 0.781 | 0.088 | 0.141 | 0.118 | 0.188 | --- | --- | 25 |
| 26 | --- | --- | 0.0678 | 1.11 | 0.832 | 0.703 | 0.114 | 0.157 | 0.112 | 0.148 | --- | --- | 26 |
| 27 | --- | --- | 0.0788 | 0.863 | 1.07 | 0.671 | 0.120 | 0.118 | 0.088 | 0.171 | --- | --- | 27 |
| 28 | --- | --- | 0.1038 | 0.598 | 1.18 | 0.749 | 0.132 | 0.088 | 0.083 | 0.180 | --- | --- | 28 |
| 29 | --- | | 0.1308 | 0.373 | 1.07 | 0.807 | 0.134 | 0.092 | 0.088 | 0.200 | --- | --- | 29 |
| 30 | --- | | 0.1328 | 0.403 | 0.891 | 0.898 | 0.182 | 0.078 | 0.114 | 0.207 | --- | --- | 30 |
| 31 | --- | | 0.1188 | | 0.888 | | 0.170 | 0.080 | | 0.193A | | --- | 31 |
| TOTAL | --- | --- | 1.893 | 37.297 | 13.788 | 149.501 | 8.884 | 3.783 | 4.240 | 8.122 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.084 | 1.24 | 0.411 | 4.88 | 0.280 | 0.121 | 0.141 | 0.187 | --- | --- | MEAN |
| MAX | --- | --- | 0.132 | 2.69 | 1.18 | 40.8 | 0.812 | 0.208 | 0.281 | 0.535 | --- | --- | MAX |
| MIN | --- | --- | 0.017 | 0.118 | 0.188 | 0.178 | 0.083 | 0.038 | 0.083 | 0.108 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.917
MAXIMUM DAILY, 40.8 ON JUN 14
MINIMUM DAILY, 0.0178 ON MAR 4
MAXIMUM INSTANTANEOUS,
48.1 AT 21:47 CST ON JUN 13

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 57 35 N
LONG 97 02 10 W
DRAINAGE AREA, 1 270 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 777 |
| FEB | --- | AUG | 326 |
| MAR | 173 | SEP | 366 |
| APR | 3 230 | OCT | 839 |
| MAY | 1 100 | NOV | --- |
| JUN | 12 800 | DEC | --- |

TOTAL DISCHARGE, 19 400 dam³

## ISLAND LAKE NEAR ISLAND LAKE - STATION NO. 04AC002

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 227.883 | 227.887 | 227.850 | 227.843 | 227.648 | 227.942 | 228.048 | 227.937 | 227.851 | 227.944 | 228.030 | 228.083 | 1 |
| 2 | 227.883A | 227.885 | 227.852 | 227.841 | 227.652 | 227.944 | 228.038 | 227.933 | 227.855 | 227.938 | 228.028 | 228.083 | 2 |
| 3 | --- | 227.884 | 227.856 | 227.841 | 227.880 | 227.950 | 228.040 | 227.936 | 227.859 | 227.938 | 228.039 | 228.080 | 3 |
| 4 | --- | 227.885 | 227.852 | 227.840 | 227.887 | 227.951 | 228.044 | 227.952 | 227.855 | 227.945 | 228.040 | 228.083 | 4 |
| 5 | --- | 227.870 | 227.849 | 227.838 | 227.878 | 227.959 | 228.038 | 227.931 | 227.848 | 227.943 | 228.040 | 228.091 | 5 |
| 6 | --- | 227.872 | 227.850 | 227.833 | 227.884 | 227.975 | 228.027 | 227.937 | 227.855 | 227.938 | 228.042 | 228.084 | 6 |
| 7 | --- | 227.870 | 227.853 | 227.831 | 227.890 | 227.977 | 228.028 | 227.918 | 227.848 | 227.958 | 228.048 | 228.083 | 7 |
| 8 | --- | 227.886 | 227.850 | 227.830 | 227.898 | 227.981 | 228.027 | 227.932 | 227.844 | 227.982 | 228.050 | 228.083 | 8 |
| 9 | --- | 227.888 | 227.850 | 227.828 | 227.704 | 227.986 | 228.028 | 227.921 | 227.850 | 227.956 | 228.052 | 228.082 | 9 |
| 10 | --- | 227.870 | 227.848 | 227.830 | 227.713 | 227.991 | 228.021 | 227.921 | 227.850 | 227.988 | 228.057 | 228.080 | 10 |
| 11 | --- | 227.870 | 227.840 | 227.830 | 227.725 | 227.997 | 228.023 | 227.920 | 227.851 | 227.951 | 228.023 | 228.078 | 11 |
| 12 | --- | 227.872 | 227.840 | 227.830 | 227.734 | 227.998 | 228.017 | 227.907 | 227.844 | 227.938 | 228.044 | 228.074A | 12 |
| 13 | --- | 227.886 | 227.842 | 227.832 | 227.740 | 227.994 | 228.018 | 227.903 | 227.843 | 227.988 | 228.057 | --- | 13 |
| 14 | --- | 227.883 | 227.838 | 227.831 | 227.743 | 227.998 | 228.013 | 227.893 | 227.841 | 227.978 | 228.058 | --- | 14 |
| 15 | --- | 227.882 | 227.838 | 227.833 | 227.751 | 228.001 | 228.010 | 227.891 | 227.844 | 227.976 | 228.053 | --- | 15 |
| 16 | --- | 227.880 | 227.835 | 227.830 | 227.761 | 228.004 | 228.006 | 227.887 | 227.842 | 227.978 | 228.054 | --- | 16 |
| 17 | --- | 227.881 | 227.832 | 227.828 | 227.777 | 228.006 | 228.008 | 227.880 | 227.848 | 227.972 | 228.054 | --- | 17 |
| 18 | --- | 227.883 | 227.832 | 227.825 | 227.785 | 228.005 | 228.006 | 227.881 | 227.840 | 227.971 | 228.055 | --- | 18 |
| 19 | --- | 227.883 | 227.834 | 227.827 | 227.808 | 228.010 | 227.987 | 227.892 | 227.855 | 227.987 | 228.058 | --- | 19 |
| 20 | 227.881A | 227.881 | 227.828 | 227.826 | 227.819 | 228.020 | 227.994 | 227.896 | 227.850 | 227.977 | 228.058 | --- | 20 |
| 21 | 227.878 | 227.880 | 227.830 | 227.830 | 227.825 | 228.029 | 227.982 | 227.891 | 227.848 | 227.982 | 228.058 | --- | 21 |
| 22 | 227.880 | 227.883 | 227.832 | 227.831 | 227.832 | 228.029 | 227.990 | 227.886 | 227.828 | 227.978 | 228.057 | --- | 22 |
| 23 | 227.877 | 227.882 | 227.832 | 227.833 | 227.840 | 228.034 | 227.978 | 227.888 | 227.848 | 227.976 | 228.058 | --- | 23 |
| 24 | 227.876 | 227.880 | 227.830 | 227.833 | 227.853 | 228.038 | 227.971 | 227.838 | 227.840 | 227.980 | 228.058 | --- | 24 |
| 25 | 227.875 | 227.868 | 227.828 | 227.834 | 227.858 | 228.042 | 227.963 | 227.881 | 227.838 | 227.982 | 228.058 | --- | 25 |
| 26 | 227.877 | 227.854 | 227.841 | 227.833 | 227.872 | 228.054 | 227.963 | 227.882 | 227.848 | 227.982 | 228.074 | --- | 26 |
| 27 | 227.878 | 227.859 | 227.841 | 227.837 | 227.883 | 228.047 | 227.956 | 227.880 | 227.848 | 228.017 | 228.075 | --- | 27 |
| 28 | 227.873 | 227.853 | 227.841 | 227.836 | 227.897 | 228.047 | 227.956 | 227.864 | 227.816 | 228.004 | 228.076 | --- | 28 |
| 29 | 227.876 | | 227.840 | 227.841 | 227.906 | 228.046 | 227.951 | 227.857 | 227.836 | 228.013 | 228.081 | --- | 29 |
| 30 | 227.874 | | 227.838 | 227.843 | 227.923 | 228.046 | 227.946 | 227.868 | 227.883 | 228.028 | 228.082 | --- | 30 |
| 31 | 227.868 | | 227.839 | | 227.933 | | 227.938 | 227.881 | | 228.034 | | --- | 31 |
| MEAN | --- | 227.864 | 227.841 | 227.833 | 227.777 | 228.004 | 228.001 | 227.921 | 227.846 | 227.971 | 228.058 | --- | MEAN |
| MAX | --- | 227.872 | 227.856 | 227.843 | 227.833 | 228.054 | 228.048 | 227.964 | 227.868 | 228.034 | 228.082 | --- | MAX |
| MIN | --- | 227.853 | 227.828 | 227.825 | 227.648 | 227.942 | 227.938 | 227.880 | 227.816 | 227.926 | 228.023 | --- | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MAXIMUM DAILY, 228.083 ON DEC 4
MINIMUM DAILY, 227.825 ON APR 18
MAXIMUM INSTANTANEOUS,
228.101 AT 12:00 CST ON DEC 3

TYPE OF GAUGE - RECORDING
LOCATION - LAT 53 52 00 N
LONG 94 40 25 W

A - MANUAL GAUGE

NATURAL FLOW

WATER LEVELS ARE REFERRED TO MANITOBA-ONTARIO BOUNDARY SURVEY DATUM

## ISLAND LAKE RIVER NEAR ISLAND LAKE - STATION NO. 04AC007

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 28.0 | 27.0 | 26.0 | 25.4 | 25.9 | 54.7 | 55.9 | 54.1 | 55.7 | 54.9 | 54.5 | 71.1 | 1 |
| 2 | 28.0A | 26.9 | 26.1 | 25.3 | 26.1 | 54.8 | 55.7 | 53.7 | 55.1 | 54.0 | 54.0 | 71.3 | 2 |
| 3 | 28.0E | 26.8 | 26.3 | 25.3 | 26.6 | 55.5 | 55.6 | 53.8 | 55.5 | 52.9 | 55.7 | 72.0 | 3 |
| 4 | 28.0E | 27.0 | 26.1 | 25.2 | 27.0 | 56.7 | 55.3 | 53.8 | 55.1 | 53.1 | 55.8 | 72.4 | 4 |
| 5 | 28.0E | 27.2 | 25.9 | 24.9 | 27.8 | 57.7 | 55.8 | 53.4 | 55.3 | 54.8 | 55.8 | 72.2 | 5 |
| 6 | 27.9E | 27.3 | 26.0 | 24.7 | 28.1 | 58.2 | 54.2 | 53.0 | 55.2 | 53.1 | 55.0 | 71.3 | 6 |
| 7 | 27.8E | 27.2 | 26.2 | 24.8 | 28.4 | 58.5 | 54.2 | 51.9 | 55.2 | 50.3 | 57.0 | 71.2 | 7 |
| 8 | 27.9E | 27.0 | 26.0 | 24.4 | 28.5 | 58.5 | 54.1 | 52.4 | 54.8 | 54.5 | 57.0 | 71.2 | 8 |
| 9 | 27.9E | 27.1 | 26.0 | 24.4 | 28.3 | 58.5 | 54.3 | 52.3 | 55.5 | 55.4 | 57.3 | 71.1 | 9 |
| 10 | 27.9E | 27.3 | 25.8 | 24.4 | 30.1 | 60.0 | 53.4 | 52.3 | 55.5 | 57.2 | 57.9 | 70.7 | 10 |
| 11 | 27.9E | 27.2 | 25.3 | 24.4 | 31.2 | 60.8 | 53.7 | 52.1 | 55.7 | 55.7 | 63.7 | 70.3 | 11 |
| 12 | 27.8E | 27.3 | 25.2 | 24.4 | 32.1 | 60.9 | 53.0 | 50.6 | 54.9 | 54.3 | 66.3 | 70.0A | 12 |
| 13 | 27.8E | 26.9 | 25.4 | 24.6 | 32.7 | 60.4 | 52.8 | 50.3 | 54.7 | 57.8 | 67.8 | 69.9E | 13 |
| 14 | 27.8E | 26.8 | 25.0 | 24.5 | 33.0 | 60.8 | 52.5 | 48.2 | 54.5 | 58.4 | 67.8 | 69.3E | 14 |
| 15 | 27.8E | 26.7 | 24.8 | 24.7 | 33.8 | 61.1 | 52.2 | 48.9 | 54.8 | 58.3 | 67.4 | 68.8E | 15 |
| 16 | 27.8E | 26.6 | 24.8 | 24.4 | 34.8 | 61.6 | 51.7 | 48.5 | 54.6 | 58.7 | 67.5 | 68.4E | 16 |
| 17 | 27.8E | 26.7 | 24.6 | 24.3 | 36.6 | 61.8 | 52.0 | 47.7 | 55.3 | 58.0 | 67.5 | 68.3E | 17 |
| 18 | 27.8E | 26.6 | 24.6 | 24.1 | 38.6 | 61.6 | 51.7 | 47.8 | 54.4 | 57.9 | 67.7 | 68.0E | 18 |
| 19 | 27.8E | 26.6 | 24.6 | 24.2 | 40.0 | 62.2 | 50.6 | 48.0 | 55.0 | 57.4 | 68.0 | 67.8E | 19 |
| 20 | 27.8A | 26.7 | 24.4 | 24.1 | 41.1 | 63.2 | 50.4 | 48.5 | 55.6 | 58.6 | 68.3 | 67.5E | 20 |
| 21 | 27.8 | 26.6 | 24.6 | 24.4 | 41.6 | 64.4 | 50.2 | 48.8 | 55.3 | 59.0 | 68.3 | 67.3E | 21 |
| 22 | 27.8 | 26.8 | 24.8 | 24.5 | 42.8 | 64.4 | 50.8 | 48.4 | 52.8 | 58.4 | 68.2 | 67.2E | 22 |
| 23 | 27.8 | 26.7 | 24.6 | 24.7 | 43.4 | 65.1 | 50.4 | 48.4 | 55.0 | 58.4 | 68.0 | 67.0E | 23 |
| 24 | 27.6 | 26.8 | 24.5 | 24.7 | 44.6 | 65.6 | 50.8 | 48.4 | 54.4 | 58.8 | 68.3 | 66.9E | 24 |
| 25 | 27.6 | 26.4 | 24.4 | 24.7 | 46.6 | 66.0 | 50.9 | 48.6 | 54.0 | 59.1 | 68.3 | 66.8E | 25 |
| 26 | 27.6 | 26.3 | 25.3 | 24.7 | 48.8 | 67.6 | 50.8 | 48.6 | 53.4 | 59.0 | 70.0 | 66.5E | 26 |
| 27 | 27.6 | 26.6 | 25.3 | 25.0 | 49.2 | 66.7 | 50.0 | 48.6 | 53.4 | 62.8 | 70.2 | 66.3E | 27 |
| 28 | 27.4 | 26.2 | 25.3 | 24.8 | 48.6 | 66.6 | 50.1 | 47.1 | 51.8 | 61.6 | 70.4 | 66.0E | 28 |
| 29 | 27.7 | | 25.2 | 25.3 | 50.6 | 66.6 | 50.7 | 50.2 | 54.0 | 62.6 | 70.8 | 65.6E | 29 |
| 30 | 27.4 | | 25.1 | 25.6 | 52.6 | 66.6 | 50.1 | 50.0 | 55.9 | 62.8 | 71.0 | 65.7E | 30 |
| 31 | 27.1 | | 25.1 | | 53.7 | | 50.2 | 50.8 | | 62.0 | | 65.6E | 31 |
| TOTAL | 861.7 | 761.3 | 783.4 | 740.6 | 1 152.6 | 1 848.1 | 1 597.7 | 1 519.1 | 1 651.3 | 1 788.0 | 2 033.7 | 2 133.3 | TOTAL |
| MEAN | 27.8 | 26.8 | 25.3 | 24.7 | 37.2 | 61.6 | 51.2 | 52.2 | 55.0 | 57.8 | 67.8 | 68.8 | MEAN |
| MAX | 28.0 | 27.3 | 26.3 | 25.6 | 53.7 | 67.6 | 55.9 | 57.1 | 55.5 | 65.0 | 71.0 | 72.4 | MAX |
| MIN | 27.1 | 26.2 | 24.4 | 24.1 | 25.9 | 54.7 | 54.2 | 47.7 | 51.8 | 52.8 | 53.7 | 65.6 | MIN |

### SUMMARY FOR THE YEAR 1988

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 47.3
MAXIMUM DAILY, 72.4 ON DEC 4
MINIMUM DAILY, 24.1 ON APR 18
MAXIMUM INSTANTANEOUS,
72.4 AT 12:00 CST ON DEC 3

TYPE OF GAUGE - RECORDING
LOCATION - LAT 54 03 34 N
LONG 94 38 34 W
DRAINAGE AREA, 14 000 km²
A - MANUAL GAUGE

E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 74 500 | JUL | 184 000 |
| FEB | 84 900 | AUG | 140 000 |
| MAR | 97 700 | SEP | 143 000 |
| APR | 64 000 | OCT | 155 000 |
| MAY | 99 800 | NOV | 176 000 |
| JUN | 160 000 | DEC | 184 000 |

TOTAL DISCHARGE, 1 480 000 dam³

## JACKFISH LAKE NEAR GRANDVIEW - STATION NO. 05LJ007

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 694.426 | 694.484 | 694.520 | 717.274 | 694.584 | 694.523 | 694.621 | 694.586 | 694.743 | 694.715 | 695.118 | 695.130 | 1 |
| 2 | 694.426 | 694.487 | 694.511 | 717.260 | 694.551 | 694.520 | 694.615 | 694.581 | 694.743 | 694.715 | 695.121 | 695.130 | 2 |
| 3 | 694.432 | 694.490 | 694.502 | 717.268 | 694.551 | 694.514 | 694.609 | 694.584 | 694.748 | 694.715 | 695.130 | 695.138 | 3 |
| 4 | 694.438 | 694.498 | 694.498 | 717.295 | 694.551 | 694.511 | 694.603 | 694.575 | 694.743 | 694.715 | 695.138 | 695.127 | 4 |
| 5 | 694.438 | 694.498 | 694.498 | 717.295 | 694.548 | 694.511 | 694.600 | 694.569 | 694.740 | 694.715 | 695.138 | 695.121 | 5 |
| 6 | 694.438 | 694.502 | 694.505 | 717.286 | 694.548 | 694.530 | 694.600 | 694.566 | 694.743 | 694.709 | 695.139 | 695.118 | 6 |
| 7 | 694.444 | 694.505 | 694.498 | 717.282 | 694.548 | 694.551 | 694.597 | 694.563 | 694.748 | 694.712 | 695.142 | 695.115 | 7 |
| 8 | 694.444 | 694.511 | 694.490 | 717.268 | 694.542 | 694.542 | 694.600 | 694.557 | 694.748 | 694.712 | 695.151 | 695.115 | 8 |
| 9 | 694.447 | 694.523 | 694.498 | 717.288 | 694.542 | 694.538 | 694.624 | 694.554 | 694.748 | 694.709 | 695.161 | 695.115 | 9 |
| 10 | 694.447 | 694.523 | 694.498 | 717.288 | 694.548 | 694.533 | 694.618 | 694.548 | 694.748 | 694.715 | 695.164 | 695.115 | 10 |
| 11 | 694.453 | 694.529 | 694.492 | 717.288 | 694.542 | 694.557 | 694.612 | 694.557 | 694.748 | 694.709 | 695.148 | 695.115 | 11 |
| 12 | 694.459 | 694.538 | 694.505 | 717.292 | 694.538 | 694.515 | 694.615 | 694.563 | 694.740 | 694.709 | 695.145 | 695.115 | 12 |
| 13 | 694.459 | 694.532 | 694.505 | 717.292 | 694.536 | 694.536 | 694.612 | 694.548 | 694.731 | 694.708 | 695.142 | 695.109 | 13 |
| 14 | 694.453 | 694.532 | 717.295 | 717.304 | 694.533 | 694.533 | 694.609 | 694.530 | 694.731 | 694.712 | 695.138 | 695.108 | 14 |
| 15 | 694.459 | 694.533 | 717.295 | 717.304 | 694.533 | 694.527 | 694.606 | 694.524 | 694.728 | 694.716 | 695.138 | 695.106 | 15 |
| 16 | 694.462 | 694.532 | 717.288 | 717.307 | 694.530 | 694.524 | 694.603 | 694.512 | 694.728 | 694.725 | 695.133 | 695.106 | 16 |
| 17 | 694.465 | 694.538 | 717.288 | 717.313 | 694.526 | 694.524 | 694.600 | 694.527 | 694.731 | 694.725 | 695.133 | 695.103 | 17 |
| 18 | 694.469 | 694.548 | 717.283 | 717.313 | 694.523 | 694.521 | 694.597 | 694.579 | 694.731 | 694.737 | 695.130 | 695.103 | 18 |
| 19 | 694.462 | 694.539 | 717.277 | 717.318 | 694.530 | 694.518 | 694.615 | 694.573 | 694.734 | 694.743 | 695.130 | 695.098 | 19 |
| 20 | 694.478 | 694.538 | 717.277 | 717.318 | 694.530 | 694.521 | 694.606 | 694.554 | 694.737 | 694.748 | 695.127 | 695.098 | 20 |
| 21 | 694.478 | 694.523 | 717.277 | 717.325 | 694.523 | 694.512 | 694.603 | 694.554 | 694.737 | 694.755 | 695.127 | 695.093 | 21 |
| 22 | 694.475 | 694.526 | 717.271 | 717.332 | 694.520 | 694.503 | 694.597 | 694.554 | 694.728 | 694.758 | 695.127 | 695.098 | 22 |
| 23 | 694.472 | 694.532 | 717.271 | 717.341 | 694.517 | 694.503 | 694.594 | 694.554 | 694.734 | 694.764 | 695.133 | 695.098 | 23 |
| 24 | 694.478 | 694.523 | 717.265 | 717.347 | 694.533 | 694.500 | 694.590 | 694.557 | 694.728 | 694.773 | 695.130 | 695.093 | 24 |
| 25 | 694.487 | 694.517 | 717.265 | 694.554 | 694.548 | 694.497 | 694.590 | 694.718 | 694.718 | 694.773 | 695.127 | 695.093 | 25 |
| 26 | 694.487 | 694.523 | 717.261 | 694.557 | 694.542 | 694.630 | 694.584 | 694.709 | 694.725 | 694.778 | 695.127 | 695.088 | 26 |
| 27 | 694.484 | 694.538 | 717.265 | 694.557 | 694.539 | 694.536 | 694.576 | 694.700 | 694.725 | 694.848 | 695.130 | 695.093 | 27 |
| 28 | 694.481 | 694.517 | 717.265 | 694.557 | 694.536 | 694.533 | 694.569 | 694.709 | 694.718 | 694.862 | 695.130 | 695.090 | 28 |
| 29 | 694.487 | | 717.265 | 694.554 | 694.536 | 694.524 | 694.569 | 694.726 | 694.721 | 695.055 | 695.133 | 695.093 | 29 |
| 30 | 694.487 | | 717.265 | 694.554 | 694.533 | 694.524 | 694.565 | 694.740 | 694.721 | 695.127 | 695.133 | 695.093 | 30 |
| 31 | 694.481 | | 717.271 | | 694.530 | | 694.563 | 694.743 | | 695.124 | | 695.090 | 31 |
| MEAN | 694.461 | 694.520 | 707.735 | 713.784 | 694.537 | 694.567 | 694.599 | 694.635 | 694.735 | 694.777 | 695.135 | 695.107 | MEAN |
| MAX | 694.487 | 694.545 | 717.295 | 717.347 | 694.554 | 694.538 | 694.624 | 694.743 | 694.748 | 695.127 | 695.164 | 695.135 | MAX |
| MIN | 694.426 | 694.484 | 694.490 | 694.554 | 694.517 | 694.511 | 694.563 | 694.548 | 694.718 | 694.709 | 695.118 | 695.090 | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MEAN, 697.298
MAXIMUM DAILY, 717.347 ON APR 24
MINIMUM DAILY, 694.426 ON JAN 1

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 23 58 N
LONG 100 48 05 W

DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

REGULATED SINCE 1967

DRAINAGE AREA,
30.3 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

REMARKS - PRIOR TO 1968 PUBLISHED AS "ABOVE JACKFISH LAKE DAM"

## JACKSON CREEK NEAR MELITA - STATION NO. 05NF015

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0.0048 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0.482 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 1.25 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 3.45 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 4.07 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 1.04 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.574 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.338 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.178 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.120 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.084 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.068 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.054 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.053 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.048 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.040 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.029 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.024 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.020 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.007 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.006 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.007 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 13.095 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.403 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 4.07 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.049
MAXIMUM DAILY, 4.07 ON APR 5
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
6.93 AT 05:30 CST ON APR 5

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 15 00 N
LONG 100 57 50 W

DRAINAGE AREA, 490 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 1 050 | OCT | 0 |
| MAY | 0.09 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, 1 050 dam³

## JACKSON LAKE NEAR SYDNEY - STATION NO. 05LL002

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | 385.488 | 386.057 | 386.045 | 386.082 | 385.778 | 385.382 | 385.173 | --- | --- | 1 |
| 2 | --- | 385.311 | --- | 385.515 | 386.056 | 386.041 | 386.063 | 385.768 | 385.377 | 385.167 | --- | --- | 2 |
| 3 | --- | --- | --- | 385.564 | 386.054 | 386.038 | 386.043 | 385.762 | 385.366 | 385.162 | --- | --- | 3 |
| 4 | --- | --- | --- | 385.621 | 386.058 | 386.033 | 386.037 | 385.763 | 385.352 | 385.162 | --- | --- | 4 |
| 5 | 385.281 | --- | --- | 385.882 | 386.057 | 386.033 | 386.033 | 385.738 | 385.338 | 385.172 | --- | --- | 5 |
| 6 | --- | --- | --- | 385.718 | 386.058 | 386.032 | 386.030 | 385.728 | 385.323 | 385.173 | --- | --- | 6 |
| 7 | --- | --- | --- | 385.762 | 386.063 | 386.040 | 386.028 | 385.718 | 385.316 | 385.174 | --- | --- | 7 |
| 8 | --- | --- | --- | 385.762 | 386.063 | 386.040 | 386.023 | 385.708 | 385.305 | 385.177 | --- | --- | 8 |
| 9 | --- | --- | --- | 385.746 | 386.063 | 386.040 | 386.042 | 385.695 | 385.294 | 385.178 | --- | --- | 9 |
| 10 | --- | --- | --- | 385.781 | 386.062 | 386.037 | 386.038 | 385.684 | 385.284 | 385.183 | --- | --- | 10 |
| 11 | --- | --- | --- | 385.814 | 386.060 | 386.041 | 386.037 | 385.668 | 385.289 | 385.188 | --- | --- | 11 |
| 12 | --- | --- | --- | 385.838 | 386.061 | 386.072 | 386.034 | 385.658 | 385.305 | 385.198 | --- | --- | 12 |
| 13 | --- | --- | --- | 385.858 | 386.063 | 386.063 | 386.032 | 385.647 | 385.289 | 385.198 | --- | 386.374 | 13 |
| 14 | --- | --- | --- | 385.877 | 386.058 | 386.063 | 386.028 | 385.632 | 385.284 | 385.197E | --- | --- | 14 |
| 15 | --- | --- | --- | 385.906 | 386.058 | 386.063 | 386.024 | 385.618 | 385.267 | 385.198 | --- | --- | 15 |
| 16 | --- | --- | --- | 385.935 | 386.034 | 386.072 | 386.017 | 385.588 | 385.278 | 385.208 | --- | --- | 16 |
| 17 | --- | --- | --- | 385.880 | 386.036 | 386.063 | 386.008 | 385.583 | 385.274 | 385.208 | --- | --- | 17 |
| 18 | --- | --- | --- | 385.897 | 386.036 | 386.063 | 385.997 | 385.588 | 385.283 | 385.208 | --- | --- | 18 |
| 19 | --- | --- | --- | 386.014 | 386.036 | 386.063 | 385.992 | 385.579 | 385.258 | 385.208 | --- | --- | 19 |
| 20 | --- | --- | --- | 386.027 | 386.033 | 386.043 | 385.982 | 385.584 | 385.256 | 385.238E | --- | --- | 20 |
| 21 | --- | --- | --- | 386.038 | 386.029 | 386.036 | 385.973 | 385.582 | 385.264 | 385.218 | --- | --- | 21 |
| 22 | --- | 385.320 | --- | 386.047 | 386.026 | 386.034 | 385.964 | 385.538 | 385.263 | 385.216 | 385.384 | --- | 22 |
| 23 | --- | --- | --- | 386.056 | 386.028 | 386.031 | 385.940 | 385.526 | 385.238 | 385.223E | --- | --- | 23 |
| 24 | --- | --- | --- | 386.068 | 386.030 | 386.028 | 385.921 | 385.513 | 385.235 | 385.228 | --- | --- | 24 |
| 25 | --- | --- | --- | 386.089 | 386.041 | 386.027 | 385.912 | 385.488 | 385.214 | 385.231E | --- | --- | 25 |
| 26 | --- | --- | --- | 386.087 | 386.050 | 386.028 | 385.883 | 385.485 | 385.207 | 385.233 | --- | --- | 26 |
| 27 | --- | --- | --- | 386.083 | 386.051 | 386.026 | 385.871 | 385.484 | 385.200 | 385.233 | --- | --- | 27 |
| 28 | --- | --- | --- | 386.058 | 386.044 | 386.026 | 385.850 | 385.480 | 385.194 | 385.248 | --- | --- | 28 |
| 29 | --- | | --- | 386.058 | 386.044 | 386.028 | 385.832 | 385.435 | 385.187 | 385.258 | --- | --- | 29 |
| 30 | --- | | 385.445 | 386.058 | 386.045 | 386.068 | 385.813 | 385.422 | 385.184 | 385.258 | --- | --- | 30 |
| 31 | --- | | 385.405 | | 386.044 | | 385.785 | 385.407 | | 385.258 | | --- | 31 |
| MEAN | --- | --- | --- | 385.880 | 386.044 | 386.046 | 385.978 | 385.606 | 385.277 | 385.207 | --- | --- | MEAN |
| MAX | --- | --- | --- | 386.089 | 386.083 | 386.063 | 386.062 | 385.778 | 385.382 | 385.258 | --- | --- | MAX |
| MIN | --- | --- | --- | 385.466 | 386.029 | 386.026 | 385.785 | 385.407 | 385.184 | 385.162 | --- | --- | MIN |

WATER LEVELS IN METRES

MAXIMUM DAILY, 386.083 ON JUN 13

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 52 11 N
LONG 98 02 08 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1988

DRAINAGE AREA,
80.8 km²

## JOUBERT CREEK AT ST. PIERRE-JOLYS - STATION NO. 05OE007

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0 B | 0.0178 | 0.282 | 0.046 | 0.038 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0 B | 0.0188 | 0.233 | 0.043 | 0.037 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0 B | 0.0188 | 0.213 | 0.038 | 0.036 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0 B | 0.0138 | 0.184 | 0.036 | 0.017 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0 B | 0.0088 | 0.194 | 0.027 | 0.014 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0 B | 0.0138 | 0.178 | 0.027 | 0.011 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0 B | 0.0148 | 0.187 | 0.038 | 0.007 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0 B | 0.0118 | 0.184 | 0.030 | 0.006 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0 B | 0.0108 | 0.184 | 0.037 | 0.006 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0 B | 0.0288 | 0.131 | 0.038 | 0.003 | 0 | 0 | 0.001 | --- | --- | 10 |
| 11 | --- | --- | 0 B | 0.0888 | 0.114 | 0.041 | 0.001 | 0 | 0 | 0.001 | --- | --- | 11 |
| 12 | --- | --- | 0 B | 0.1858 | 0.100 | 0.040 | 0.008 | 0 | 0 | 0.001 | --- | --- | 12 |
| 13 | --- | --- | 0 B | 0.1878 | 0.093 | 0.087 | 0.002 | 0 | 0 | 0.001 | --- | --- | 13 |
| 14 | --- | --- | 0 B | 0.2858 | 0.093 | 0.082 | 0.001 | 0 | 0 | 0.001 | --- | --- | 14 |
| 15 | --- | --- | 0 B | 0.3518 | 0.088 | 0.078 | 0.001 | 0 | 0 | 0.004 | --- | --- | 15 |
| 16 | --- | --- | 0 B | 3.74 B | 0.084 | 0.086 | 0.001 | 0 | 0 | 0.001 | --- | --- | 16 |
| 17 | --- | --- | 0 B | 2.88 B | 0.108 | 0.082 | 0 | 0 | 0 | 0.001 | --- | --- | 17 |
| 18 | --- | --- | 0 B | 1.30 B | 0.090 | 0.080 | 0 | 0.008 | 0 | 0.001 | --- | --- | 18 |
| 19 | --- | --- | 0 B | 1.17 | 0.113 | 0.082 | 0 | 0.027 | 0 | 0.001 | --- | --- | 19 |
| 20 | --- | --- | 0 B | 1.84 | 0.108 | 0.043 | 0 | 0.001 | 0 | 0.002 | --- | --- | 20 |
| 21 | --- | --- | 0 B | 1.49 | 0.102 | 0.043 | 0 | 0 | 0 | 0.002 | --- | --- | 21 |
| 22 | --- | --- | 0 B | 1.78 | 0.090 | 0.038 | 0 | 0 | 0 | 0.001 | --- | --- | 22 |
| 23 | --- | --- | 0 B | 1.48 | 0.081 | 0.037 | 0 | 0 | 0 | 0.001 | --- | --- | 23 |
| 24 | --- | --- | 0 B | 1.40 | 0.084 | 0.074 | 0 | 0 | 0 | 0.001 | --- | --- | 24 |
| 25 | --- | --- | 0 B | 1.10 | 0.057 | 0.073 | 0 | 0 | 0 | 0.001 | --- | --- | 25 |
| 26 | --- | --- | 0 B | 0.818 | 0.058 | 0.072 | 0 | 0 | 0 | 0.001 | --- | --- | 26 |
| 27 | --- | --- | 0 B | 0.867 | 0.048 | 0.081 | 0 | 0 | 0 | 0.001 | --- | --- | 27 |
| 28 | --- | --- | 0 B | 0.572 | 0.063 | 0.088 | 0 | 0 | 0 | 0.001 | --- | --- | 28 |
| 29 | --- | | 0 B | 0.472 | 0.063 | 0.118 | 0 | 0 | 0 | 0.001 | --- | --- | 29 |
| 30 | --- | | 0 B | 0.362 | 0.048 | 0.080 | 0 | 0 | 0 | 0.001A | --- | --- | 30 |
| 31 | --- | | 0.0018 | | 0.053 | | 0 | 0 | | 0.001E | | --- | 31 |
| TOTAL | --- | --- | 0.001 | 31.848 | 3.803 | 1.581 | 0.175 | 0.037 | 0 | 0.037 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.728 | 0.118 | 0.053 | 0.008 | 0.001 | 0 | 0.001 | --- | --- | MEAN |
| MAX | --- | --- | 0.001 | 3.74 | 0.282 | 0.118 | 0.037 | 0.027 | 0 | 0.004 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.008 | 0.048 | 0.027 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.111
MAXIMUM DAILY, 3.740 ON APR 16
MINIMUM DAILY, 0B ON MAR 1

### SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 26 28 N
LONG 96 56 23 W
DRAINAGE AREA, 328 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 15.1 |
| FEB | --- | AUG | 3.20 |
| MAR | 0.09 | SEP | 0 |
| APR | 1 890 | OCT | 3.33 |
| MAY | 311 | NOV | --- |
| JUN | 137 | DEC | --- |

TOTAL DISCHARGE, 2 360 dam³

## KENTON CREEK AT KENTON - STATION NO. 05MD006

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0.010B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0.020B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0.033A | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0.024 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.020B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.018B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.013B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.008B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.004B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.001A | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.018B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.045 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.030 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.015 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.015 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.020 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.023 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.018 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 0.337 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.011 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.045 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.001
MAXIMUM DAILY, 0.045 ON APR 14
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
0.122 AT 01:33 CST ON APR 8

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 59 34 N
LONG 100 38 38 W
DRAINAGE AREA, 46.6 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 29.1 | OCT | 0 |
| MAY | 0 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, 29.1 dam³

## KENTON RESERVOIR NEAR KENTON - STATION NO. 05MD803

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | 440.238E | 440.483 | 440.400 | 440.340 | 440.208 | 440.088 | 439.880 | 439.908E | --- | 1 |
| 2 | --- | --- | --- | 440.273 | 440.481 | 440.403 | 440.338 | 440.203 | 440.084 | 439.874 | 439.908E | --- | 2 |
| 3 | --- | --- | --- | 440.328 | 440.487 | 440.398 | 440.328 | 440.198 | 440.107 | 439.871 | 439.908E | --- | 3 |
| 4 | 440.190 | --- | --- | 440.418 | 440.484 | 440.381 | 440.334 | 440.188 | 440.108 | 439.872 | 439.907E | --- | 4 |
| 5 | --- | --- | --- | 440.487 | 440.480 | 440.390 | 440.331 | 440.178 | 440.101 | 439.873 | 439.908 | --- | 5 |
| 6 | --- | --- | --- | 440.487 | 440.444 | 440.388 | 440.319 | 440.186 | 440.093 | 439.868 | 439.908E | --- | 6 |
| 7 | --- | --- | --- | 440.478 | 440.441 | 440.383 | 440.314 | 440.187 | 440.080 | 439.868 | 439.908E | --- | 7 |
| 8 | --- | --- | --- | 440.477 | 440.442 | 440.378 | 440.311 | 440.180 | 440.082 | 439.863 | 439.908E | --- | 8 |
| 9 | --- | --- | --- | 440.478 | 440.440 | 440.378 | 440.311 | 440.143 | 440.073 | 439.858 | 439.908E | --- | 9 |
| 10 | --- | --- | --- | 440.480 | 440.437 | 440.370 | 440.309 | 440.138 | 440.087 | 439.858 | 439.908E | --- | 10 |
| 11 | --- | --- | --- | 440.478 | 440.433 | 440.367 | 440.303 | 440.134 | 440.083 | 439.841 | 439.908E | --- | 11 |
| 12 | --- | --- | --- | 440.478 | 440.438 | 440.367 | 440.301 | 440.130 | 440.089 | 439.833 | 439.908 | 439.883 | 12 |
| 13 | --- | --- | --- | 440.484 | 440.427 | 440.398 | 440.290 | 440.132 | 440.086 | 439.826 | --- | --- | 13 |
| 14 | --- | --- | --- | 440.476 | 440.434 | 440.382 | 440.282 | 440.130 | 440.063 | 439.824 | --- | --- | 14 |
| 15 | --- | --- | 440.148 | 440.476 | 440.431 | 440.389 | 440.276 | 440.135 | 440.047 | 439.821 | --- | --- | 15 |
| 16 | --- | --- | --- | 440.475 | 440.430 | 440.358 | 440.270 | 440.117 | 440.043 | 439.816 | --- | --- | 16 |
| 17 | --- | --- | --- | 440.474 | 440.432 | 440.357 | 440.281 | 440.118 | 440.041 | 439.813 | --- | --- | 17 |
| 18 | --- | --- | --- | 440.472 | 440.443 | 440.358 | 440.288 | 440.144 | 440.037 | 439.810 | --- | --- | 18 |
| 19 | --- | --- | --- | 440.471 | 440.444 | 440.384 | 440.280 | 440.140 | 440.038 | 439.807 | --- | --- | 19 |
| 20 | --- | --- | --- | 440.486 | 440.442 | 440.349 | 440.277 | 440.134 | 440.034 | 439.808 | --- | --- | 20 |
| 21 | --- | --- | --- | 440.488 | 440.438 | 440.343 | 440.289 | 440.132 | 440.030 | 439.805 | --- | --- | 21 |
| 22 | --- | 440.182 | --- | 440.488 | 440.432 | 440.338 | 440.268 | 440.132 | 440.033 | 439.804 | 439.905 | --- | 22 |
| 23 | --- | 440.198 | --- | 440.471 | 440.426 | 440.337 | 440.260 | 440.128 | 440.015 | 439.802 | --- | --- | 23 |
| 24 | --- | --- | --- | 440.481 | 440.426 | 440.340 | 440.244 | 440.126 | 440.009 | 439.804 | --- | --- | 24 |
| 25 | --- | --- | --- | 440.483 | 440.426 | 440.336 | 440.240 | 440.124 | 440.004 | 439.804E | --- | --- | 25 |
| 26 | 440.182 | --- | --- | 440.482 | 440.418 | 440.338 | 440.232 | 440.118 | 440.008 | 439.803E | --- | --- | 26 |
| 27 | --- | --- | --- | 440.481 | 440.416 | 440.338 | 440.224 | 440.114 | 439.988 | 439.803E | --- | --- | 27 |
| 28 | --- | --- | --- | 440.475 | 440.413 | 440.340 | 440.218 | 440.112 | 439.880 | 439.803E | --- | --- | 28 |
| 29 | --- | | --- | 440.472 | 440.408 | 440.347 | 440.214 | 440.108 | 439.886 | 439.802 | --- | --- | 29 |
| 30 | --- | | 440.170 | 440.487 | 440.403 | 440.348 | 440.208 | 440.103 | 439.884 | 439.803E | --- | --- | 30 |
| 31 | --- | | 440.204E | | 440.401 | | 440.208 | 440.102 | | 439.804E | | --- | 31 |
| MEAN | --- | --- | --- | 440.483 | 440.433 | 440.382 | 440.277 | 440.140 | 440.048 | 439.829 | --- | --- | MEAN |
| MAX | --- | --- | --- | 440.484 | 440.483 | 440.403 | 440.340 | 440.208 | 440.107 | 439.880 | --- | --- | MAX |
| MIN | --- | --- | --- | 440.238 | 440.401 | 440.338 | 440.208 | 440.102 | 439.884 | 439.802 | --- | --- | MIN |

WATER LEVELS IN METRES

MAXIMUM DAILY, 440.484 ON APR 13

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 56 34 N
LONG 100 38 04 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1988

DRAINAGE AREA,
110 km²

## KETTLE RIVER NEAR GILLAM - STATION NO. 05UF004

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.288 | 2.528 | 2.158 | 2.118 | 2.218 | 51.6 | 7.51 | 3.52 | 1.79 | 7.15 | 5.672 | 3.388 | 1 |
| 2 | 3.258 | 2.518 | 2.148 | 2.128 | 2.348 | 48.4 | 7.05 | 3.41 | 1.84 | 6.40 | 5.512 | 3.308 | 2 |
| 3 | 3.218 | 2.488 | 2.148 | 2.108 | 2.308 | 46.0 | 7.05 | 3.35 | 1.85 | 6.15 | 5.672 | 3.268 | 3 |
| 4 | 3.188 | 2.488 | 2.128 | 2.108 | 2.378 | 43.1 | 7.74 | 3.12 | 1.84 | 6.57 | 5.649 | 3.218 | 4 |
| 5 | 3.188 | 2.488 | 2.128 | 2.188 | 2.488 | 41.3 | 7.86 | 1.92 | 1.88 | 7.07 | 5.488 | 3.128 | 5 |
| 6 | 3.128 | 2.488 | 2.118 | 2.188 | 2.608 | 38.7 | 7.23 | 1.86 | 2.22 | 7.18 | 5.408 | 3.118 | 6 |
| 7 | 3.118 | 2.428 | 2.118 | 2.188 | 2.778 | 36.6 | 6.80 | 1.41 | 2.71 | 8.23 | 5.278 | 3.088 | 7 |
| 8 | 3.078 | 2.428 | 2.108 | 2.188 | 2.858 | 34.8 | 6.61 | 1.25 | 4.28 | 8.88 | 5.198 | 3.078 | 8 |
| 9 | 3.048 | 2.408 | 2.108 | 2.188 | 3.308 | 33.3 | 6.37 | 1.14 | 4.78 | 7.88 | 5.858 | 3.048 | 9 |
| 10 | 3.008 | 2.378 | 2.108 | 2.188 | 3.708 | 30.8 | 6.27 | 1.04 | 4.88 | 7.18 | 5.788 | 3.028 | 10 |
| 11 | 2.888 | 2.388 | 2.098 | 2.188 | 13.4 E | 29.2 | 5.70 | 0.887 | 5.08 | 7.42 | 5.618 | 3.008 | 11 |
| 12 | 2.878 | 2.368 | 2.098 | 2.168 | 30.0 E | 27.1 | 5.88 | 0.848 | 5.08 | 7.22 | 5.488 | 2.988 | 12 |
| 13 | 2.858 | 2.338 | 2.088 | 2.168 | 47.5 E | 25.7 | 5.31 | 0.831 | 4.88 | 8.80 | 5.348 | 2.978 | 13 |
| 14 | 2.818 | 2.318 | 2.088 | 2.168 | 65.0 E | 24.7 | 5.08 | 0.874 | 4.44 | 8.88 | 5.118 | 2.858 | 14 |
| 15 | 2.888 | 2.308 | 2.078 | 2.168 | 88.8 | 23.4 | 4.85 | 0.878 | 4.88 | 7.31 | 5.008 | 2.838 | 15 |
| 16 | 2.848 | 2.288 | 2.078 | 2.188 | 87.1 | 22.4 | 4.61 | 0.783 | 4.42 | 7.18 | 4.888 | 2.818 | 16 |
| 17 | 2.818 | 2.278 | 2.078 | 2.188 | 87.0 | 20.8 | 4.41 | 0.748 | 4.32 | 8.76 | 4.788 | 2.808 | 17 |
| 18 | 2.788 | 2.288 | 2.078 | 2.168 | 73.8 | 18.1 | 4.08 | 0.714 | 4.27 | 8.88 | 4.838 | 2.888 | 18 |
| 19 | 2.778 | 2.268 | 2.068 | 2.178 | 63.2 | 16.8 | 3.80 | 0.718 | 4.32 | 8.87 | 4.808 | 2.888 | 19 |
| 20 | 2.788 | 2.248 | 2.068 | 2.178 | 53.4 | 17.8 | 3.63 | 0.852 | 4.18 | 8.87 | 4.408 | 2.848 | 20 |
| 21 | 2.748 | 2.228 | 2.068 | 2.178 | 44.4 | 17.8 | 3.38 | 0.588 | 4.24 | 8.81 | 4.388 | 2.838 | 21 |
| 22 | 2.728 | 2.218 | 2.068 | 2.178 | 84.4 | 16.0 | 3.27 | 0.573 | 4.78 | 7.53 | 4.188 | 2.818 | 22 |
| 23 | 2.708 | 2.208 | 2.078 | 2.178 | 63.1 | 13.5 | 3.18 | 0.532 | 5.00 | 7.07 | 4.008 | 2.788 | 23 |
| 24 | 2.888 | 2.198 | 2.078 | 2.188 | 78.8 | 12.3 | 2.84 | 0.511 | 5.18 | 6.81 | 4.008 | 2.788 | 24 |
| 25 | 2.858 | 2.178 | 2.088 | 2.188 | 76.7 | 11.3 | 2.80 | 0.803 | 5.08 | 6.87 | 3.908 | 2.778 | 25 |
| 26 | 2.628 | 2.188 | 2.088 | 2.198 | 70.7 | 10.3 | 3.05 | 1.04 | 5.73 | 8.85 | 3.808 | 2.778 | 26 |
| 27 | 2.608 | 2.188 | 2.088 | 2.188 | 87.8 | 9.27 | 3.28 | 1.48 | 7.43 | 8.81 | 3.708 | 2.778 | 27 |
| 28 | 2.588 | 2.158 | 2.088 | 2.188 | 85.0 | 8.80 | 3.33 | 1.61 | 8.02 | 8.24 | 3.608 | 2.788 | 28 |
| 29 | 2.578 | | 2.108 | 2.208 | 81.4 | 8.48 | 3.14 | 1.74 | 7.04 | 7.88 | 3.508 | 2.788 | 29 |
| 30 | 2.558 | | 2.108 | 2.208 | 58.0 | 7.98 | 3.04 | 1.83 | 8.57 | 7.85 | 3.448 | 2.788 | 30 |
| 31 | 2.548 | | 2.118 | | 54.7 | | 2.81 | 1.80 | | 7.008 | | 2.788 | 31 |
| TOTAL | 89.02 | 84.94 | 84.88 | 84.98 | 1 408.48 | 748.41 | 152.79 | 38.373 | 133.38 | 218.32 | 152.03 | 91.39 | TOTAL |
| MEAN | 2.87 | 3.32 | 2.09 | 2.17 | 45.4 | 24.9 | 4.93 | 1.24 | 4.45 | 8.88 | 5.07 | 2.95 | MEAN |
| MAX | 3.28 | 2.62 | 2.15 | 2.20 | 84.4 | 51.6 | 7.86 | 2.82 | 8.02 | 7.88 | 5.87 | 3.38 | MAX |
| MIN | 2.54 | 2.15 | 2.08 | 2.11 | 2.21 | 7.98 | 2.80 | 0.811 | 1.85 | 6.15 | 3.44 | 2.78 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 8.64
MAXIMUM DAILY, 84.4 ON MAY 21
MINIMUM DAILY, 0.511 ON AUG 24
MAXIMUM INSTANTANEOUS,
85.1 AT 23:54 CST ON MAY 21

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 55 20 40 N
LONG 94 41 00 W
DRAINAGE AREA, 1 050 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 7 880 | JUL | 13 200 |
| FEB | 6 810 | AUG | 3 320 |
| MAR | 6 810 | SEP | 11 600 |
| APR | 6 810 | OCT | 18 700 |
| MAY | 122 000 | NOV | 13 100 |
| JUN | 64 700 | DEC | 7 900 |

TOTAL DISCHARGE, 279 000 dam³

## KILLARNEY LAKE AT KILLARNEY - STATION NO. 05DA803

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 491.376E | 491.382 | 491.378 | 491.380E | 492.477E | 492.401E | 492.332E | 492.138E | 492.032E | 491.921 | 491.838 | 491.828E | 1 |
| 2 | 491.381E | 491.382E | 491.374E | 491.566 | 492.480E | 492.386E | 492.328E | 492.136 | 492.031E | 491.918E | 491.838E | 491.823E | 2 |
| 3 | 491.385E | 491.382E | 491.371E | 491.787E | 492.484 | 492.381E | 492.321E | 492.134 | 492.031E | 491.914E | 491.838E | 491.820 | 3 |
| 4 | 491.386 | 491.382E | 491.368E | 492.037E | --- | 492.388 | 492.315E | 492.128E | 492.028E | 491.911 | 491.838E | 491.820E | 4 |
| 5 | 491.387E | 491.382 | 491.366 | 492.276 | --- | 492.373E | 492.309 | 492.120E | 492.021 | --- | 491.838 | 491.820E | 5 |
| 6 | 491.385E | 491.382E | 491.363E | 492.308E | --- | 492.368E | 492.307E | 492.115 | 492.021 | --- | 491.838E | 491.820 | 6 |
| 7 | 491.384E | 491.382E | 491.359E | 492.338E | --- | 492.368 | 492.304E | 492.108E | 492.014E | --- | 491.838E | 491.815E | 7 |
| 8 | 491.383 | 491.382 | 491.356 | 492.368E | --- | 492.341E | 492.302E | 492.102E | 492.008E | --- | 491.838E | 491.810E | 8 |
| 9 | 491.383E | 491.382E | 491.356E | 492.386 | --- | 492.337E | 492.298 | 492.095 | 491.998E | --- | 491.838E | 491.808E | 9 |
| 10 | 491.384E | 491.382E | 491.356E | 492.401E | --- | 492.332E | 492.297E | 492.085E | 491.991 | --- | 491.833E | 491.800 | 10 |
| 11 | 491.384 | 491.382E | 491.356E | 492.408E | --- | 492.327 | 492.294 | 492.085E | 491.984E | --- | 491.831E | 491.803E | 11 |
| 12 | 491.384E | 491.382 | 491.356 | 492.408 | --- | 492.337E | 492.285E | 492.084E | 491.988E | --- | 491.828 | 491.807E | 12 |
| 13 | 491.384E | 491.382E | 491.356E | 492.413E | --- | 492.347E | 492.278E | 492.084 | 492.001 | --- | 491.825E | 491.810 | 13 |
| 14 | 491.383E | 491.382E | 491.356E | 492.418E | 492.424 | 492.357 | 492.268E | 492.087E | 491.998E | --- | 491.821E | 491.810E | 14 |
| 15 | 491.383 | 491.382 | 491.356 | 492.423E | 492.424E | 492.367E | 492.267E | 492.081E | 491.998E | 491.991 | 491.818 | 491.810E | 15 |
| 16 | 491.383E | 491.386E | 491.356E | 492.428 | 492.426E | 492.367E | 492.248 | 492.074 | 491.993E | 491.988E | 491.831 | 491.810E | 16 |
| 17 | 491.383E | 491.387E | 491.356E | 492.428E | 492.425 | 492.367E | 492.245E | 492.068E | 491.991 | 491.986E | 491.827E | 491.810 | 17 |
| 18 | 491.382 | 491.384E | 491.356E | 492.428E | 492.425E | 492.367 | 492.241E | 492.064E | 491.988E | 491.981E | 491.824E | 491.807E | 18 |
| 19 | 491.383E | 491.381 | 491.356 | 492.428 | 492.425E | 492.360E | 492.238 | 492.064E | 491.984E | 491.846 | 491.820 | 491.803E | 19 |
| 20 | 491.383E | 491.378E | 491.353E | 492.433E | 492.425E | 492.344E | 492.225E | 492.063 | 491.981 | 491.848E | 491.820E | 491.800 | 20 |
| 21 | 491.383E | 491.376 | 491.348E | 492.438E | 492.425 | 492.337 | 492.213E | 492.063E | 491.971E | 491.848E | 491.820E | 491.800E | 21 |
| 22 | 491.383 | 491.376 | 491.346 | 492.443E | 492.423E | 492.337E | 492.200E | 492.063E | 491.961E | 491.848 | 491.820 | 491.800E | 22 |
| 23 | 491.383E | 491.376E | 491.346E | 492.446 | 492.422E | 492.336E | 492.187 | 492.063 | 491.951E | 491.848E | 491.823E | 491.800E | 23 |
| 24 | 491.383E | 491.376E | 491.351E | 492.455E | 492.420 | 492.336E | 492.180E | 492.060E | 491.941 | 491.848E | 491.825E | 491.800 | 24 |
| 25 | 491.383 | 491.376E | 491.354E | 492.461E | 492.418E | 492.338 | 492.174E | 492.048E | 491.936E | 491.848 | 491.824E | 491.797E | 25 |
| 26 | 491.383E | 491.376 | 491.356 | 492.466 | 492.418E | 492.336E | 492.167 | 492.045E | 491.934E | 491.846E | 491.830 | 491.783E | 26 |
| 27 | 491.383E | 491.376E | 491.354E | 492.473 | 492.417E | 492.331E | 492.162E | 492.042 | 491.931 | 491.843E | 491.830E | 491.780 | 27 |
| 28 | 491.383E | 491.376E | 491.353E | 492.473E | 492.416 | 492.326 | 492.157E | 492.038E | 491.928E | 491.841E | 491.830E | --- | 28 |
| 29 | 491.383 | | 491.351 | 492.473E | 492.413E | 492.333E | 492.151E | 492.035E | 491.926E | 491.838 | 491.830 | --- | 29 |
| 30 | 491.385E | | 491.327E | 492.473 | 492.408E | 492.330 | 492.146 | 492.032 | 491.923E | 491.838E | 491.828E | --- | 30 |
| 31 | 491.386E | | 491.804E | | 492.406 | | 492.143E | 492.032E | | 491.838E | | --- | 31 |
| MEAN | 491.384 | 491.388 | 491.383 | 492.328 | --- | 492.360 | 492.244 | 492.078 | 491.983 | --- | 491.828 | --- | MEAN |
| MAX | 491.386 | 491.382 | 491.661 | 492.473 | --- | 492.401 | 492.332 | 492.139 | 492.032 | --- | 491.838 | --- | MAX |
| MIN | 491.376 | 491.376 | 491.348 | 491.566 | --- | 492.327 | 492.143 | 492.032 | 491.923 | --- | 491.818 | --- | MIN |

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 10 30 N
LONG 98 40 12 W

DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1958

DRAINAGE AREA,
334 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## KISKITTO LAKE NEAR NORWAY HOUSE - STATION NO. 05UB013

DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 212.716 | 212.704 | 212.682 | 212.888 | 212.885 | 212.835 | 212.843 | 212.488 | 212.836 | 212.834 | 212.878 | 212.888 | 1 |
| 2 | 212.713 | 212.708 | 212.697 | 212.874 | 212.858 | 212.844 | 212.848 | 212.485 | 212.848 | 212.863 | 212.873 | 212.708 | 2 |
| 3 | 212.711 | 212.697 | 212.678 | 212.871 | 212.852 | 212.808 | 212.848 | 212.483 | 212.844 | 212.898 | 212.867 | 212.702 | 3 |
| 4 | 212.716 | 212.706 | 212.678 | 212.888 | 212.850 | 212.824 | 212.848 | 212.433 | 212.880 | 212.889 | 212.888 | 212.708 | 4 |
| 5 | 212.720 | 212.713 | 212.678 | 212.876 | 212.851 | 212.820 | 212.834 | 212.471 | 212.883 | 212.808 | 212.884 | 212.718 | 5 |
| 6 | 212.718 | 212.718 | 212.877 | 212.872 | 212.852 | 212.805 | 212.855 | 212.485 | 212.831 | 212.880 | 212.872 | 212.717 | 6 |
| 7 | 212.718 | 212.708 | 212.880 | 212.873 | 212.851 | 212.812 | 212.842 | 212.489 | 212.883 | 212.884 | 212.874 | 212.720 | 7 |
| 8 | 212.721 | 212.702 | 212.880 | 212.888 | 212.848 | 212.810 | 212.837 | 212.482 | 212.884 | 212.888 | 212.883 | 212.713 | 8 |
| 9 | 212.728 | 212.888 | 212.886 | 212.888 | 212.848 | 212.814 | 212.830 | 212.488 | 212.872 | 212.900 | 212.878 | 212.703 | 9 |
| 10 | 212.728 | 212.708 | 212.877 | 212.867 | 212.840 | 212.880 | 212.810 | 212.488 | 212.871 | 212.900 | 212.872 | 212.708 | 10 |
| 11 | 212.723 | 212.702 | 212.888 | 212.880 | 212.838 | 212.878 | 212.811 | 212.484 | 212.878 | 212.818 | 212.888 | 212.708 | 11 |
| 12 | 212.724 | 212.887 | 212.878 | 212.888 | 212.838 | 212.840 | 212.807 | 212.488 | 212.888 | 212.820 | 212.884 | 212.720 | 12 |
| 13 | 212.726 | 212.703 | 212.883 | 212.887 | 212.845 | 212.878 | 212.808 | 212.488 | 212.880 | 212.813 | 212.890 | 212.711 | 13 |
| 14 | 212.728 | 212.702 | 212.880 | 212.882 | 212.844 | 212.878 | 212.806 | 212.470 | 212.888 | 212.818 | 212.888 | 212.713 | 14 |
| 15 | 212.717 | 212.700 | 212.884 | 212.884 | 212.848 | 212.878 | 212.812 | 212.482 | 212.884 | 212.810 | 212.883 | 212.710 | 15 |
| 16 | 212.712 | 212.703 | 212.887 | 212.888 | 212.848 | 212.888 | 212.813 | 212.477 | 212.888 | 212.811 | 212.883 | 212.711 | 16 |
| 17 | 212.710 | 212.703 | 212.874 | 212.888 | 212.853 | 212.888 | 212.808 | 212.478 | 212.888 | 212.824 | 212.888 | 212.708 | 17 |
| 18 | 212.712 | 212.708 | 212.873 | 212.881 | 212.888 | 212.887 | 212.838 | 212.478 | 212.881 | 212.835 | 212.888 | 212.718 | 18 |
| 19 | 212.708 | 212.705 | 212.874 | 212.888 | 212.848 | 212.888 | 212.830 | 212.478 | 212.884 | 212.836 | 212.883 | 212.718 | 19 |
| 20 | 212.711 | 212.888 | 212.874 | 212.882 | 212.888 | 212.881 | 212.813 | 212.808 | 212.882 | 212.828 | 212.888 | 212.712 | 20 |
| 21 | 212.708 | 212.880 | 212.874 | 212.844 | 212.704 | 212.880 | 212.817 | 212.821 | 212.808 | 212.833 | 212.888 | 212.712 | 21 |
| 22 | 212.708 | 212.888 | 212.880 | 212.838 | 212.701 | 212.873 | 212.818 | 212.487 | 212.888 | 212.821 | 212.886 | 212.707 | 22 |
| 23 | 212.716 | 212.888 | 212.878 | 212.848 | 212.883 | 212.871 | 212.810 | 212.804 | 212.810 | 212.818 | 212.705 | 212.710 | 23 |
| 24 | 212.710 | 212.888 | 212.878 | 212.843 | 212.886 | 212.848 | 212.810 | 212.827 | 212.803 | 212.818 | 212.702 | 212.713 | 24 |
| 25 | 212.712 | 212.888 | 212.878 | 212.848 | 212.818 | 212.843 | 212.818 | 212.831 | 212.897 | 212.822 | 212.710 | 212.714 | 25 |
| 26 | 212.710 | 212.885 | 212.885 | 212.883 | 212.882 | 212.481 | 212.488 | 212.848 | 212.809 | 212.813 | 212.897 | 212.718 | 26 |
| 27 | 212.708 | 212.882 | 212.874 | 212.844 | 212.888 | 212.817 | 212.487 | 212.880 | 212.808 | 212.888 | 212.888 | 212.721 | 27 |
| 28 | 212.708 | 212.885 | 212.888 | 212.880 | 212.880 | 212.828 | 212.488 | 212.842 | 212.822 | 212.877 | 212.888 | 212.713 | 28 |
| 29 | 212.706 | | 212.888 | 212.888 | 212.872 | 212.834 | 212.488 | 212.845 | 212.808 | 212.877 | 212.704 | 212.721 | 29 |
| 30 | 212.711 | | 212.887 | 212.882 | 212.888 | 212.842 | 212.488 | 212.849 | 212.828 | 212.874 | 213.703 | 212.721 | 30 |
| 31 | 212.708 | | 212.884 | | 212.887 | | 212.487 | 212.847 | | 212.888 | | 212.728 | 31 |
| MEAN | 212.714 | 212.888 | 212.878 | 212.888 | 212.887 | 212.880 | 212.818 | 212.488 | 212.881 | 212.818 | 212.887 | 212.713 | MEAN |
| MAX | 212.728 | 212.715 | 212.897 | 212.878 | 212.704 | 212.844 | 212.888 | 212.880 | 212.822 | 212.877 | 212.710 | 212.728 | MAX |
| MIN | 212.704 | 212.882 | 212.884 | 212.838 | 212.818 | 212.481 | 212.487 | 212.433 | 212.828 | 212.834 | 212.884 | 212.888 | MIN |

SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MEAN, 212.833
MAXIMUM DAILY, 212.728 ON JAN 9
MINIMUM DAILY, 212.433 ON AUG 4
MAXIMUM INSTANTANEOUS,
212.770 AT 23:07 CST ON MAY 18

TYPE OF GAUGE - RECORDING
LOCATION - LAT 54 18 10 N
LONG 98 26 20 W

REGULATED SINCE 1973

DRAINAGE AREA,
838 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (MAN. HYDRO EXT.)

## KISKITTOGISU LAKE AT WHISKEY JACK LANDING - STATION NO. 05UB017

DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | 216.138 | --- | --- | --- | 217.200 | --- | 217.481 | 217.143 | --- | 216.620 | 216.278 | 1 |
| 2 | --- | 216.122 | --- | --- | --- | 217.170 | --- | 217.427 | 217.164 | --- | 216.563 | 216.261 | 2 |
| 3 | --- | 216.123 | --- | --- | --- | 217.138 | --- | 217.418 | 217.224 | --- | 216.595 | 216.237 | 3 |
| 4 | --- | 216.126 | --- | --- | --- | 217.102 | --- | 217.382 | 217.263 | --- | 216.574 | 216.231 | 4 |
| 5 | --- | 216.133 | --- | --- | --- | 217.163 | --- | 217.212 | 217.239 | --- | 216.563 | 216.207 | 5 |
| 6 | --- | 216.134 | --- | --- | --- | 217.113 | --- | 217.214 | 217.180 | --- | 216.647 | 216.174 | 6 |
| 7 | --- | --- | --- | --- | --- | 217.088 | --- | 217.288 | 217.183 | --- | 216.858 | 216.181 | 7 |
| 8 | --- | --- | --- | --- | --- | 217.138 | --- | 217.307 | 217.114 | --- | 216.889 | 216.128 | 8 |
| 9 | --- | --- | --- | --- | --- | 217.203 | --- | 217.352 | 217.105 | --- | 216.937 | 216.108 | 9 |
| 10 | 216.128A | --- | --- | --- | --- | 217.188 | 217.221A | 217.342 | 217.040 | --- | 216.824 | 216.089 | 10 |
| 11 | 216.128A | --- | --- | --- | --- | 217.147 | 217.288A | 217.332 | 217.033 | --- | 216.810 | 216.083A | 11 |
| 12 | 216.133A | --- | --- | --- | --- | 216.949 | 217.306 | 217.285 | 217.110 | --- | 216.563 | 216.023A | 12 |
| 13 | 216.132 | --- | --- | --- | --- | 216.943 | 217.333 | 217.188 | 217.184 | --- | 216.545 | --- | 13 |
| 14 | 216.134 | --- | --- | --- | --- | 217.063 | 217.358 | 217.236 | 217.183 | --- | 216.520 | --- | 14 |
| 15 | 216.136 | --- | --- | --- | --- | 217.181 | 217.380 | 217.271 | 217.183 | --- | 216.491 | --- | 15 |
| 16 | 216.135 | --- | --- | --- | --- | 217.331 | 217.416 | 217.306 | 217.119 | --- | 216.448 | --- | 16 |
| 17 | 216.134 | --- | --- | --- | --- | 217.383 | 217.423 | 217.347 | --- | --- | 216.428 | --- | 17 |
| 18 | 216.136 | --- | --- | --- | --- | 217.262 | 217.404 | 217.388 | --- | --- | 216.383 | --- | 18 |
| 19 | 216.142 | --- | --- | --- | --- | --- | 217.412 | 217.227 | --- | --- | 216.368 | --- | 19 |
| 20 | 216.142 | --- | --- | --- | --- | --- | 217.420 | 217.146 | --- | --- | 216.388 | --- | 20 |
| 21 | 216.143 | --- | --- | --- | --- | --- | 217.447 | 217.227 | --- | --- | 216.388 | --- | 21 |
| 22 | 216.142 | --- | --- | --- | --- | --- | 217.647 | 217.285 | --- | --- | 216.363 | --- | 22 |
| 23 | 216.141 | --- | --- | --- | 217.121A | --- | 217.498 | 217.281 | --- | --- | 216.363 | --- | 23 |
| 24 | 216.142 | --- | --- | --- | 217.137 | --- | 217.487 | 217.349 | --- | 216.888A | 216.334 | --- | 24 |
| 25 | 216.144 | --- | --- | --- | 216.898 | --- | 217.491 | 217.410 | --- | 216.950A | 216.337 | --- | 25 |
| 26 | 216.146 | --- | --- | --- | 216.825 | --- | 217.348 | 217.439 | --- | --- | 216.328 | --- | 26 |
| 27 | 216.147 | --- | --- | --- | 216.941 | --- | 217.328 | 217.346 | --- | --- | 216.324 | --- | 27 |
| 28 | 216.146 | 216.142A | --- | --- | 216.887 | --- | 217.301 | 217.281 | --- | --- | 216.310 | --- | 28 |
| 29 | 216.148 | | --- | --- | 217.090 | --- | 217.377 | 217.170 | --- | --- | 216.303 | --- | 29 |
| 30 | 216.148 | | --- | --- | 217.152 | --- | 217.423 | 217.128A | --- | --- | 216.287 | --- | 30 |
| 31 | 216.148 | | --- | | 217.228 | | 217.427 | 217.130 | | 216.843A | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | --- | --- | 217.284 | --- | --- | 216.482 | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | --- | 217.481 | --- | --- | 216.683 | --- | MAX |
| MIN | --- | --- | --- | --- | --- | --- | --- | 217.128 | --- | --- | 216.287 | --- | MIN |

SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MAXIMUM DAILY, 217.647 ON JUL 22

TYPE OF GAUGE - RECORDING
LOCATION - LAT 54 28 20 N
LONG 98 00 20 W

A - MANUAL GAUGE

REGULATED SINCE 1973

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (MAN. HYDRO EXT.)

## KISSISSING LAKE AT COLD LAKE - STATION NO. 05EA003

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 313.285 | 313.275 | 313.262 | 313.253 | 313.277 | 313.378 | 313.441 | 313.380 | 313.314 | 312.298 | 313.304 | 313.340 | 1 |
| 2 | 313.283 | 313.273 | 313.258 | 313.254 | 313.278 | 313.383 | 313.459 | 313.388 | 313.312 | 313.307 | 313.301 | 313.338 | 2 |
| 3 | 313.288 | 313.273 | 313.250 | 313.255 | 313.278 | 313.382 | 313.447 | 313.384 | 313.303 | 313.303 | 313.300 | 313.337 | 3 |
| 4 | 313.285 | 313.271 | 313.261 | 313.255 | 313.285 | 313.378 | 313.452 | 313.364 | 313.307 | 313.301 | 313.308 | 313.338 | 4 |
| 5 | 313.288 | 313.278 | 313.258 | 313.254 | 313.284 | 313.379 | 313.448 | 313.370 | 313.308 | 313.319 | 313.308 | 313.341 | 5 |
| 6 | 313.283 | 313.275 | 313.253 | 313.251 | 313.282 | 313.387 | 313.452 | 313.371 | 313.297 | 313.300 | 313.303 | 313.339 | 6 |
| 7 | 313.281 | 313.274 | 313.258 | 313.251 | 313.286 | 313.388 | 313.451 | 313.370 | 313.328 | 313.294 | 313.309 | 313.338 | 7 |
| 8 | 313.280 | 313.271 | 313.259 | 313.250 | 313.284 | 313.370 | 313.445 | 313.388 | 313.326 | 313.285 | 313.307 | 313.338 | 8 |
| 9 | 313.280 | 313.272 | 313.257 | 313.248 | 313.287 | 313.387 | 313.454 | 313.382 | 313.340 | 313.305 | 313.304 | 313.340 | 9 |
| 10 | 313.278 | 313.272 | 313.257 | 313.247 | 313.286 | 313.352 | 313.450 | 313.381 | 313.324 | 313.295 | 313.314 | 313.341 | 10 |
| 11 | 313.282 | 313.273 | 313.258 | 313.244 | 313.288 | 313.384 | 313.448 | 313.358 | 313.328 | 313.305A | 313.322 | 313.338 | 11 |
| 12 | 313.282 | 313.273 | 313.259 | 313.242 | 313.291 | 313.348 | 313.448 | 313.349 | 313.328 | 313.302E | 313.320 | 313.338 | 12 |
| 13 | 313.283 | 313.274 | 313.258 | 313.247 | 313.284 | 313.384 | 313.448 | 313.344 | 313.328 | 313.298E | 313.319 | 313.338 | 13 |
| 14 | 313.285 | 313.273 | 313.256 | 313.243 | 313.287 | 313.384 | 313.448 | 313.348 | 313.319 | 313.298E | 313.319 | 313.334 | 14 |
| 15 | 313.279 | 313.271 | 313.259 | 313.243 | 313.291 | 313.347 | 313.443 | 313.342 | 313.328 | 313.293E | 313.319 | 313.338 | 15 |
| 16 | 313.282 | 313.271 | 313.264 | 313.243 | 313.285 | 313.353 | 313.442 | 313.338 | 313.314 | 313.290E | 313.317 | 313.340 | 16 |
| 17 | 313.278 | 313.268 | 313.253 | 313.241 | 313.290 | 313.387 | 313.437 | 313.330 | 313.318 | 313.287E | 313.321 | 313.337 | 17 |
| 18 | 313.281 | 313.270 | 313.251 | 313.242 | 313.292 | 313.366 | 313.433 | 313.327 | 313.323 | 313.284E | 313.317 | 313.338 | 18 |
| 19 | 313.282 | 313.271 | 313.253 | 313.241 | 313.284 | 313.360 | 313.433 | 313.313 | 313.312 | 313.281E | 313.325 | 313.338 | 19 |
| 20 | 313.278 | 313.268 | 313.251 | 313.238 | 313.331 | 313.371 | 313.428 | 313.312 | 313.325 | 313.278A | 313.327 | 313.337 | 20 |
| 21 | 313.281 | 313.269 | 313.249 | 313.241 | 313.355 | 313.385 | 313.418 | 313.306 | 313.317 | 313.288 | 313.320 | 313.342 | 21 |
| 22 | 313.284 | 313.268 | 313.248 | 313.248 | 313.385 | 313.383 | 313.418 | 313.295 | 313.318 | 313.290 | 313.328 | 313.338 | 22 |
| 23 | 313.283 | 313.268 | 313.245 | 313.260 | 313.386 | 313.387 | 313.418 | 313.286 | 313.302 | 313.294 | 313.328 | 313.341 | 23 |
| 24 | 313.280 | 313.267 | 313.248 | 313.264 | 313.388 | 313.385 | 313.403 | 313.306 | 313.324 | 313.286 | 313.325 | 313.341 | 24 |
| 25 | 313.281 | 313.268 | 313.245 | 313.268 | 313.378 | 313.385 | 313.411 | 313.317 | 313.307 | 313.293 | 313.328 | 313.342 | 25 |
| 26 | 313.281 | 313.268 | 313.245 | 313.269 | 313.375 | 313.380 | 313.402 | 313.338 | 313.297 | 313.287 | 313.331 | 313.338 | 26 |
| 27 | 313.280 | 313.268 | 313.248 | 313.271 | 313.380 | 313.403 | 313.391 | 313.336 | 313.307 | 313.284 | 313.332 | 313.338 | 27 |
| 28 | 313.277 | 313.265 | 313.245 | 313.273 | 313.383 | 313.408 | 313.384 | 313.328 | 313.318 | 313.321 | 313.327 | 313.338 | 28 |
| 29 | 313.278 | | 313.248 | 313.276 | 313.387 | 313.430 | 313.382 | 313.327 | 313.294 | 313.318 | 313.331 | 313.334 | 29 |
| 30 | 313.278 | | 313.248 | 313.275 | 313.384 | 313.438 | 313.385 | 313.324 | 313.287 | 313.309 | 313.330 | 313.337 | 30 |
| 31 | 313.277 | | 313.248 | | 313.387 | | 313.376 | 313.317 | | 313.308 | | 313.338 | 31 |
| MEAN | 313.281 | 313.271 | 313.253 | 313.253 | 313.319 | 313.371 | 313.428 | 313.339 | 313.315 | 313.297 | 313.318 | 313.338 | MEAN |
| MAX | 313.288 | 313.275 | 313.262 | 313.276 | 313.387 | 313.438 | 313.459 | 313.380 | 313.340 | 313.321 | 313.332 | 313.342 | MAX |
| MIN | 313.277 | 313.265 | 313.245 | 313.238 | 313.277 | 313.347 | 313.376 | 313.288 | 313.287 | 313.278 | 313.300 | 313.334 | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MEAN, 313.316
MAXIMUM DAILY, 313.459 ON JUL 2
MINIMUM DAILY, 313.238 ON APR 20
MAXIMUM INSTANTANEOUS,
313.484 AT 14:45 CST ON JUL 2

TYPE OF GAUGE - RECORDING
LOCATION - LAT 55 07 50 N
LONG 101 08 50 W

A - MANUAL GAUGE

E - ESTIMATED

DRAINAGE AREA,
2 000 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1956 ADJ.)

## KRONSGARY DRAIN NEAR SEWELL - STATION NO. 05DC024

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.008 | 0 | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.003 | 0 | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.2858 | 0 | 0 | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | 0B | 3.36 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | 0B | 3.43 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | 0B | 3.77 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | 0B | 3.07 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | 0B | 2.85 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.803 | 0 | 0 | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.283 | 0 | 0 | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.262 | 0 | 0 | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.162 | 0 | 0 | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.103 | 0. | 0 | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.061 | 0 | 0 | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.038 | 0 | 0 | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.028 | 0 | 0 | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | 0B | 0.018 | 0 | 0 | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | 0B | 0.014 | 0 | 0 | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | --- | --- | | --- | | --- | 31 |
| TOTAL | --- | --- | 0 | 16.886 | 0.013 | 0 | --- | --- | --- | --- | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.623 | 0 | 0 | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | 0 | 3.77 | 0.008 | 0 | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO JUN

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.153
MAXIMUM DAILY, 3.770 ON APR 18
MINIMUM DAILY, 0B 0B MAR 1
MAXIMUM INSTANTANEOUS,
4.139 AT 05:11 CST ON APR 18

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 16 50 N
LONG 97 30 20 W

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | --- |
| FEB | --- | AUG | --- |
| MAR | 0 | SEP | --- |
| APR | 1 630 | OCT | --- |
| MAY | 1.12 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, 1 630 dam³

## LA SALLE RIVER ABOVE HOGUE DAM - STATION NO. 05OC802

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | --- | 229.518 | 229.534E | 229.532E | 229.543 | 229.622E | 229.614 | --- | 1 |
| 2 | --- | --- | --- | --- | --- | 229.518E | 229.543E | 229.527 | 229.548E | 229.623E | 229.608E | --- | 2 |
| 3 | --- | --- | --- | --- | --- | 229.518E | 229.551 | 229.528E | 229.550E | 229.624 | 229.604 | --- | 3 |
| 4 | --- | --- | --- | --- | 229.589 | 229.518E | 229.551E | 229.532 | 229.553 | 229.624E | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 229.550 | 229.518 | 229.551 | 229.519E | 229.563E | 229.623E | --- | --- | 5 |
| 6 | --- | --- | --- | --- | 229.538E | 229.520E | 229.551E | 229.515E | 229.553 | 229.623E | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 229.526E | 229.522 | 229.551 | 229.512 | 229.558E | 229.622E | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 229.517 | 229.537E | 229.551E | 229.512E | 229.563 | 229.622E | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 229.514E | 229.552 | 229.551E | 229.512 | 229.568E | 229.621E | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 229.510 | 229.562E | 229.551 | 229.511E | 229.570E | 229.621E | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 229.502E | 229.612E | 229.562E | 229.510 | 229.573 | 229.620E | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 229.494 | 229.642 | 229.552 | 229.510E | 229.586E | 229.620E | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 229.502E | 229.642E | 229.585E | 229.511E | 229.603 | 229.619E | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 229.511E | 229.642 | 229.577 | 229.511 | 229.609E | 229.618E | --- | --- | 14 |
| 15 | --- | --- | --- | --- | 229.519 | 229.640E | 229.575E | 229.509E | 229.614 | 229.618E | --- | --- | 15 |
| 16 | --- | --- | --- | --- | 229.524E | 229.637 | 229.574E | 229.507 | 229.614E | 229.616 | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 229.529 | 229.607E | 229.572 | 229.505E | 229.614E | 229.618E | --- | --- | 17 |
| 18 | --- | --- | --- | --- | 229.534E | 229.575E | 229.567E | 229.503 | 229.614 | 229.614 | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 229.539 | 229.545 | 229.563 | 229.510E | 229.614E | 229.611E | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 229.544E | 229.534E | 229.567E | 229.518E | 229.614 | 229.606 | --- | --- | 20 |
| 21 | --- | --- | --- | --- | 229.549E | 229.521 | 229.552 | 229.525 | 229.620E | 229.610E | --- | --- | 21 |
| 22 | --- | --- | --- | --- | 229.554 | 229.519E | 229.552E | 229.529E | 229.626 | 229.612E | --- | --- | 22 |
| 23 | --- | --- | --- | --- | 229.554E | 229.518 | 229.552E | 229.533 | 229.626E | 229.614 | --- | --- | 23 |
| 24 | --- | --- | --- | --- | 229.553 | 229.525E | 229.552 | 229.536E | 229.628E | 229.615E | --- | --- | 24 |
| 25 | --- | --- | --- | --- | 229.563E | 229.534E | 229.552E | 229.543 | 229.624 | 229.618 | --- | --- | 25 |
| 26 | --- | --- | --- | --- | 229.553 | 229.543 | 229.552 | 229.543E | 229.624E | 229.621E | --- | --- | 26 |
| 27 | --- | --- | --- | --- | 229.548E | 229.535E | 229.550E | 229.543E | 229.624 | 229.624 | --- | --- | 27 |
| 28 | --- | --- | --- | --- | 229.540E | 229.526 | 229.547 | 229.543 | 229.622E | 229.624E | --- | --- | 28 |
| 29 | --- | | --- | --- | 229.533 | 229.526E | 229.544E | 229.543E | 229.620 | 229.624E | --- | --- | 29 |
| 30 | --- | | --- | --- | 229.531E | 229.526 | 229.540E | 229.543 | 229.621E | 229.624 | --- | --- | 30 |
| 31 | --- | | --- | | 229.528 | | 229.537 | 229.543E | | 229.619E | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | 229.585 | 229.564 | 229.523 | 229.585 | 229.618 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | 229.642 | 229.577 | 229.543 | 229.628 | 229.624 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | 229.518 | 229.534 | 229.503 | 229.543 | 229.606 | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 41 02 N
LONG 97 20 57 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1953

DRAINAGE AREA
2 170 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## LA SALLE RIVER ABOVE LA SALLE DAM (P.R. 330) - STATION NO. 05OC804

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 228.240 | 228.018 | 228.042 | 227.986E | 228.003E | 228.015E | 228.068E | --- | 1 |
| 2 | --- | --- | --- | --- | 228.161E | 228.018E | 228.038E | 227.986 | 228.003 | 228.018 | 228.068E | --- | 2 |
| 3 | --- | --- | --- | --- | 228.042 | 228.021 | 228.033 | 227.985E | 228.000E | 228.024 | 228.052E | --- | 3 |
| 4 | --- | --- | --- | --- | 228.032E | 228.019E | 228.026E | 227.984E | 227.986 | 228.033E | 228.045 | --- | 4 |
| 5 | --- | --- | --- | --- | 228.022E | 228.018 | 228.018 | 227.983 | 227.986E | 228.042E | --- | --- | 5 |
| 6 | --- | --- | --- | 228.091 | 228.012 | 228.020E | 228.018E | 227.982E | 228.000 | 228.051 | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 228.012E | 228.022E | 228.018E | 227.980 | 228.000E | 228.054E | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 228.012E | 228.024 | 228.018 | 227.988E | 228.000E | 228.056E | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 228.012 | 228.022E | 228.018E | 227.987 | 228.000 | 228.059E | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 228.010E | 228.021 | 228.018 | 227.988E | 228.000E | 228.061E | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 228.009 | 228.073E | 228.018E | 227.983E | 228.001E | 228.064E | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 227.988E | 228.128E | 228.018 | 227.981 | 228.002E | 228.066E | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 227.967 | 228.179E | 228.017E | 227.977E | 228.003 | 228.068E | --- | --- | 13 |
| 14 | --- | --- | --- | 228.487 | 227.988E | 228.231 | 228.018E | 227.972 | 228.003E | 228.071E | --- | --- | 14 |
| 15 | --- | --- | --- | 228.512E | 227.990 | 228.179E | 228.015 | 227.968E | 228.003E | 228.073E | --- | --- | 15 |
| 16 | --- | --- | --- | 228.538E | 227.988E | 228.128 | 228.012E | 227.966E | 228.003 | 228.076 | --- | --- | 16 |
| 17 | --- | --- | --- | 228.580 | 227.987 | 228.093E | 228.009 | 227.983 | 228.000E | 228.073E | --- | --- | 17 |
| 18 | --- | --- | --- | 228.630 | 228.001E | 228.067 | 228.008E | 227.971E | 227.986 | 228.070E | --- | --- | 18 |
| 19 | --- | --- | --- | 228.774 | 228.014E | 228.054E | 228.005 | 227.980E | 227.986E | 228.067E | --- | --- | 19 |
| 20 | --- | --- | --- | 228.818 | 228.027 | 228.051 | 228.003E | 227.988E | 228.000E | 228.064 | --- | --- | 20 |
| 21 | --- | --- | --- | 228.115 | 228.024E | 228.033E | 227.986 | 227.986 | 228.001E | 228.061E | --- | --- | 21 |
| 22 | --- | --- | --- | 228.184 | 228.021 | 228.016 | 227.986E | 228.003E | 228.003 | 228.057E | --- | --- | 22 |
| 23 | --- | --- | --- | 228.021 | 228.022E | 228.010E | 227.986E | 228.009 | 228.003E | 228.054E | --- | --- | 23 |
| 24 | --- | --- | --- | 228.762 | 228.023E | 228.016 | 227.986 | 228.005E | 228.003E | 228.051 | --- | --- | 24 |
| 25 | --- | --- | --- | 228.545 | 228.024 | 228.024E | 228.001E | 228.001E | 228.003 | 228.051E | --- | --- | 25 |
| 26 | --- | --- | --- | 228.508E | 228.023E | 228.030 | 228.006 | 227.986 | 227.986E | 228.070E | --- | --- | 26 |
| 27 | --- | --- | --- | 228.472 | 228.021 | 228.024E | 228.005E | 228.003E | 227.993 | 228.079 | --- | --- | 27 |
| 28 | --- | --- | --- | 228.418E | 228.020E | 228.018 | 228.004E | 228.009 | 228.000E | 228.077E | --- | --- | 28 |
| 29 | --- | | --- | 228.384E | 228.018E | 228.028E | 228.003 | 228.008E | 228.008E | 228.076E | --- | --- | 29 |
| 30 | --- | | --- | 228.310 | 228.016 | 228.034E | 228.000E | 228.003 | 228.012 | 228.074E | --- | --- | 30 |
| 31 | --- | | --- | | 228.016E | | 227.986 | 228.003E | | 228.073 | | --- | 31 |
| MEAN | --- | --- | --- | --- | 228.024 | 228.054 | 228.012 | 227.980 | 228.001 | 228.068 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 228.240 | 228.231 | 228.042 | 228.009 | 228.012 | 228.079 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 227.967 | 228.016 | 227.986 | 227.963 | 227.993 | 228.016 | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 41 43 N
LONG 97 15 52 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1961

DRAINAGE AREA
2 380 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## LA SALLE RIVER ABOVE LEMKO DAM - STATION NO. 05QC803

DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | --- | 230.850E | 230.873E | 230.840E | 230.850 | 230.830E | 230.845 | --- | 1 |
| 2 | --- | --- | --- | --- | --- | 230.850 | 230.867E | 230.840 | 230.850E | 230.830 | 230.845E | --- | 2 |
| 3 | --- | --- | --- | --- | --- | 230.850E | 230.850 | 230.840E | 230.850E | 230.840 | 230.845 | --- | 3 |
| 4 | --- | --- | --- | --- | 230.872 | 230.850E | 230.855E | 230.840 | 230.850 | 230.830 | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 230.880 | 230.850 | 230.850 | 230.837E | 230.850E | 230.835E | --- | --- | 5 |
| 6 | --- | --- | --- | --- | 230.850 | 230.850E | 230.850E | 230.833E | 230.850 | 230.840 | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 230.850E | 230.850 | 230.850 | 230.830 | 230.850E | 230.843E | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 230.850 | 230.855E | 230.850E | 230.830E | 230.850 | 230.843E | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 230.845E | 230.850 | 230.850E | 230.830 | 230.850E | 230.845 | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 230.840 | 230.877E | 230.850 | 230.830E | 230.850E | 230.845E | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 230.840E | 230.893E | 230.850E | 230.830 | 230.850 | 230.845 | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 230.840 | 230.910 | 230.850 | 230.830E | 230.845E | 230.848E | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 230.838E | 230.860E | 230.850E | 230.830E | 230.840 | 230.850 | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 230.837E | 231.010 | 230.850 | 230.830 | 230.838E | 230.843E | --- | --- | 14 |
| 15 | --- | --- | --- | --- | 230.835 | 230.975E | 230.850E | 230.836E | 230.832E | 230.835 | --- | --- | 15 |
| 16 | --- | --- | --- | --- | 230.845E | 230.840 | 230.850E | 230.840 | 230.838E | 230.845 | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 230.865 | 230.920E | 230.850 | 230.840E | 230.824E | 230.843E | --- | --- | 17 |
| 18 | --- | --- | --- | --- | 230.860E | 230.900E | 230.850E | 230.840 | 230.820 | 230.840 | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 230.865 | 230.880 | 230.850 | 230.845E | 230.823E | 230.840E | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 230.883E | 230.890E | 230.850E | 230.850E | 230.825 | 230.840 | --- | --- | 20 |
| 21 | --- | --- | --- | --- | 230.862E | 230.840 | 230.850 | 230.855 | 230.825E | 230.840E | --- | --- | 21 |
| 22 | --- | --- | --- | --- | 230.860 | 230.845E | 230.850E | 230.858E | 230.825 | 230.840E | --- | --- | 22 |
| 23 | --- | --- | --- | --- | 230.863E | 230.850 | 230.850E | 230.860 | 230.828E | 230.840 | --- | --- | 23 |
| 24 | --- | --- | --- | --- | 230.865 | 230.850E | 230.850 | 230.860E | 230.832E | 230.843E | --- | --- | 24 |
| 25 | --- | --- | --- | --- | 230.883E | 230.850E | 230.848E | 230.850 | 230.835 | 230.845 | --- | --- | 25 |
| 26 | --- | --- | --- | --- | 230.850 | 230.850 | 230.845 | 230.860E | 230.833E | 230.848E | --- | --- | 26 |
| 27 | --- | --- | --- | --- | 230.868E | 230.845E | 230.845E | 230.860E | 230.830 | 230.850 | --- | --- | 27 |
| 28 | --- | --- | --- | --- | 230.857E | 230.840 | 230.845 | 230.850 | 230.830E | 230.848E | --- | --- | 28 |
| 29 | --- | --- | --- | --- | 230.855 | 230.850E | 230.843E | 230.860E | 230.830 | 230.847E | --- | --- | 29 |
| 30 | --- | --- | --- | --- | 230.853E | 230.850 | 230.842E | 230.850 | 230.830E | 230.845 | --- | --- | 30 |
| 31 | --- | --- | --- | --- | 230.850 | | 230.840 | 230.858E | | 230.845E | | | 31 |
| MEAN | --- | --- | --- | --- | --- | 230.877 | 230.850 | 230.844 | 230.837 | 230.842 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | 231.010 | 230.873 | 230.850 | 230.850 | 230.850 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | 230.840 | 230.840 | 230.830 | 230.820 | 230.830 | --- | --- | MIN |

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 39 05 N
LONG 97 23 23 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1965

DRAINAGE AREA
2 050 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## LA SALLE RIVER ABOVE SANFORD DAM - STATION NO. 05QC805

DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 232.865 | 232.837E | 232.811E | 232.778E | 232.787 | --- | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 232.878E | 232.834 | 232.810E | 232.773 | 232.787E | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | 232.870 | 232.843E | 232.809 | 232.770E | 232.787E | --- | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 232.858 | 232.852 | 232.815E | 232.787 | 232.787 | --- | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 232.835 | 232.852E | 232.821 | 232.763E | 232.803E | --- | --- | --- | 5 |
| 6 | --- | --- | --- | --- | 232.818E | 232.852 | 232.821E | 232.788E | 232.808 | --- | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 232.812E | 232.868E | 232.821 | 232.764 | 232.808E | --- | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 232.808 | 232.858 | 232.821E | 232.787E | 232.808 | --- | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 232.806E | 232.881E | 232.821E | 232.781 | 232.808E | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 232.808 | 232.884E | 232.821 | 232.761E | 232.808E | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 232.800E | 232.867E | 232.821E | 232.781 | 232.808 | 232.818 | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 232.794 | 232.870 | 232.821 | 232.768E | 232.808E | 232.821E | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 232.794E | 232.901E | 232.825E | 232.768E | 232.808 | 232.825 | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 232.794E | 232.931 | 232.828 | 232.764 | 232.812E | 232.825E | --- | --- | 14 |
| 15 | --- | --- | --- | --- | 232.794 | 232.901E | 232.828E | 232.778E | 232.818 | 232.825E | --- | --- | 15 |
| 16 | --- | --- | 232.778 | --- | 232.787E | 232.870 | 232.828E | 232.787 | 232.818E | 232.825 | --- | --- | 16 |
| 17 | --- | --- | --- | 233.262 | 232.800 | 232.862E | 232.828 | 232.784E | 232.818E | 232.828E | --- | --- | 17 |
| 18 | --- | --- | --- | 233.281E | 232.823E | 232.864E | 232.828E | 232.781 | 232.815 | 232.831 | --- | --- | 18 |
| 19 | --- | --- | --- | 233.300 | 232.848 | 232.848 | 232.824E | 232.786E | 232.808E | 232.831E | --- | --- | 19 |
| 20 | --- | --- | --- | 233.368E | 232.843E | 232.840E | 232.821E | 232.801E | 232.803 | 232.831 | --- | --- | 20 |
| 21 | --- | --- | --- | 233.477E | 232.840E | 232.834 | 232.818E | 232.808 | 232.800E | 232.831E | --- | --- | 21 |
| 22 | --- | --- | --- | 233.585 | 232.837 | 232.831E | 232.817E | 232.805E | 232.787 | 232.831E | --- | --- | 22 |
| 23 | --- | --- | --- | 233.368E | 232.837E | 232.828 | 232.815E | 232.803 | 232.787E | 232.831 | --- | --- | 23 |
| 24 | --- | --- | --- | 233.184 | 232.837 | 232.828E | 232.813E | 232.800E | 232.787E | 232.828E | --- | --- | 24 |
| 25 | --- | --- | --- | 233.088E | 232.838E | 232.824E | 232.811E | 232.787 | 232.787 | 232.825 | --- | --- | 25 |
| 26 | --- | --- | --- | 232.986 | 232.834 | 232.821 | 232.808 | 232.787E | --- | 232.825E | --- | --- | 26 |
| 27 | --- | --- | --- | 232.933E | 232.838E | 232.821E | 232.803E | 232.787E | --- | 232.825 | --- | --- | 27 |
| 28 | --- | --- | --- | 232.910 | 232.842E | 232.821 | 232.787 | 232.787 | --- | 232.827E | 232.837 | --- | 28 |
| 29 | --- | --- | --- | 232.902E | 232.848 | 232.817E | 232.791E | 232.787E | --- | 232.829E | --- | --- | 29 |
| 30 | --- | --- | --- | 232.894E | 232.843E | 232.812 | 232.785E | 232.787 | --- | 232.831 | --- | --- | 30 |
| 31 | --- | --- | --- | | 232.840 | | 232.779 | 232.787E | | --- | | --- | 31 |
| MEAN | --- | --- | --- | --- | 232.838 | 232.850 | 232.815 | 232.781 | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 232.865 | 232.931 | 232.828 | 232.808 | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 232.784 | 232.812 | 232.779 | 232.764 | --- | --- | --- | --- | MIN |

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 41 02 N
LONG 97 25 59 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1961

DRAINAGE AREA
1 830 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## LA SALLE RIVER ABOVE ST. NORBERT DAM - STATION NO. 05OC804

DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | --- | 226.218 | 226.253 | 226.153 | 226.172 | 226.173E | --- | --- | 1 |
| 2 | --- | --- | --- | --- | --- | 226.218 | 226.302 | 226.133 | 226.172E | 226.183E | --- | --- | 2 |
| 3 | --- | --- | --- | --- | --- | 226.218E | 226.203 | 226.134E | 226.172 | 226.182 | --- | --- | 3 |
| 4 | --- | --- | --- | --- | --- | 226.218E | 226.208E | 226.138E | 226.172E | --- | --- | --- | 4 |
| 5 | --- | --- | --- | --- | --- | 226.218E | 226.207 | 226.137 | 226.172 | --- | --- | --- | 5 |
| 6 | --- | --- | --- | --- | --- | 226.218 | 226.207E | 226.137E | 226.187 | --- | --- | --- | 6 |
| 7 | --- | --- | --- | --- | --- | 226.217 | 226.207 | 226.137 | 226.182 | --- | --- | --- | 7 |
| 8 | --- | --- | --- | --- | --- | 226.218E | 226.208E | 226.137E | 226.182E | --- | --- | --- | 8 |
| 9 | --- | --- | --- | 226.815 | --- | 226.218 | 226.210E | 226.137 | 226.142 | --- | --- | --- | 9 |
| 10 | --- | --- | --- | 226.713E | 226.227E | 226.211E | 226.137 | 226.148E | --- | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 226.810 | 226.238E | 226.213 | 226.123E | 226.147 | --- | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 226.847 | 226.245 | 226.213 | 226.113 | 226.172 | --- | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 226.853E | 226.247E | 226.214 | 226.112E | 226.180E | --- | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 226.858 | 226.248E | 226.207E | 226.112 | 226.147 | --- | --- | --- | 14 |
| 15 | --- | --- | --- | --- | 226.889E | 226.260E | 226.200 | 226.102E | 226.147E | 226.202 | --- | --- | 15 |
| 16 | --- | --- | --- | --- | 226.880 | 226.252E | 226.197 | 226.092 | 226.147 | 226.202E | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 226.880E | 226.254E | 226.197E | 226.080 | 226.182E | 226.202 | --- | --- | 17 |
| 18 | --- | --- | --- | --- | 226.020 | 226.255E | 226.197E | 226.067 | 226.187 | 226.202 | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 226.117E | 226.257 | 226.197 | 226.112E | 226.137 | 226.202E | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 226.213 | 226.237 | 226.187 | 226.137E | 226.137E | 226.202 | --- | --- | 20 |
| 21 | --- | --- | --- | --- | 226.220E | 226.227E | 226.187 | 226.182 | 226.137E | 226.202E | --- | --- | 21 |
| 22 | --- | --- | --- | --- | 226.228 | 226.217E | 226.184 | 226.172E | 226.137 | 226.202 | --- | --- | 22 |
| 23 | --- | --- | --- | --- | 226.211E | 226.207 | 226.183E | 226.183 | 226.142 | 226.201E | --- | --- | 23 |
| 24 | --- | --- | --- | --- | 226.195 | 226.213E | 226.182 | 226.177E | 226.148E | 226.188 | --- | --- | 24 |
| 25 | --- | --- | --- | --- | 226.201E | 226.217E | 226.181E | 226.172 | 226.147 | 226.201E | --- | --- | 25 |
| 26 | --- | --- | --- | --- | 226.207 | 226.222E | 226.180 | 226.167 | 226.148E | 226.202 | --- | --- | 26 |
| 27 | --- | --- | --- | --- | 226.220 | 226.227 | 226.172 | 226.167 | 226.180 | 226.202E | --- | --- | 27 |
| 28 | --- | --- | --- | --- | 226.218E | 226.202 | 226.171E | 226.170E | 226.185E | 226.202 | --- | --- | 28 |
| 29 | --- | | --- | --- | 226.215 | 226.252E | 226.170 | 226.172 | 226.180 | --- | --- | --- | 29 |
| 30 | --- | | --- | --- | 226.218E | 226.302 | 226.184E | 226.171E | 226.182 | --- | --- | --- | 30 |
| 31 | --- | | --- | | 226.217 | | 226.167 | 226.170 | | --- | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | 226.232 | 226.198 | 226.140 | 226.184 | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | 226.302 | 226.302 | 226.183 | 226.172 | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | 226.202 | 226.167 | 226.087 | 226.137 | --- | --- | --- | MIN |

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 43 17 N
LONG 97 14 36 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1941

DRAINAGE AREA
2 610 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## LA SALLE RIVER ABOVE STARBUCK DAM (P.R. 332) - STATION NO. 05OC805

DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 235.668E | --- | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 235.653 | --- | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | 235.648E | --- | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 235.638E | --- | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 235.632 | 235.632 | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | --- | 235.644 | 235.628E | 235.638E | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 235.620E | 235.647 | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 235.613 | 235.642E | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 235.608E | 235.638 | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 235.604 | 235.658E | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 235.607E | 235.674E | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 235.610 | 235.693E | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | --- | --- | --- | 235.711 | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | --- | --- | --- | 235.708E | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | --- | --- | --- | 235.705 | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | --- | --- | --- | 235.696E | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | --- | --- | --- | 235.687 | 235.638 | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | --- | 235.870 | --- | --- | 235.638E | 235.638 | --- | --- | --- | --- | 18 |
| 19 | --- | --- | --- | 235.830E | --- | --- | 235.638 | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | --- | 235.801E | --- | --- | 235.638E | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | --- | 235.851 | --- | --- | 235.638 | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | --- | 235.851E | --- | --- | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | --- | 235.851E | 235.632 | --- | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | --- | 235.851 | 235.638E | --- | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | --- | 235.798E | 235.647 | --- | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | --- | 235.748 | 235.644E | 235.638 | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | --- | 235.728E | 235.641 | --- | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | --- | 235.705 | --- | --- | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | --- | 235.692E | --- | --- | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | --- | 235.678E | --- | --- | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | --- | | --- | | --- | --- | | 235.668 | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MIN |

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 48 12 N
LONG 97 36 54 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1961

DRAINAGE AREA
1 710 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## LA SALLE RIVER AT ELIE - STATION NO. 05OC007

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 239.213 | 239.184E | 239.183 | 239.174 | 239.174 | 239.174 | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 239.178 | 239.186E | 239.182E | 239.184 | 239.188E | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | 239.168E | 239.181 | 239.201E | 239.182E | 239.204 | --- | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 239.182E | 239.178E | 239.210 | 239.188 | 239.218E | --- | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 239.188E | 239.176E | 239.204 | 239.187E | 239.233 | --- | 239.178 | --- | 5 |
| 6 | --- | --- | --- | --- | 239.148E | 239.172 | 239.202 | 239.188E | 239.224 | --- | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 239.142E | 239.174E | 239.198 | 239.184E | 239.214E | 239.188 | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 239.135 | 239.176E | 239.203E | 239.182E | 239.208E | --- | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 239.128E | 239.177 | 239.207 | 239.180E | 239.195 | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 239.117 | 239.182E | 239.202E | 239.148E | --- | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 238.113 | 238.187 | 238.197 | 239.148E | --- | --- | 239.185 | --- | 11 |
| 12 | --- | --- | --- | --- | 239.113E | 239.210E | 238.217 | 239.143E | --- | --- | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 239.113E | 239.234E | 239.218E | 239.143E | --- | --- | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 239.113 | 239.287 | 239.218 | 239.141E | --- | --- | --- | --- | 14 |
| 15 | --- | --- | --- | 238.828 | 239.112E | 239.237 | 239.217E | 239.138 | --- | --- | --- | --- | 15 |
| 16 | --- | --- | --- | 238.720E | 238.110 | 239.233E | 239.218E | 239.140E | --- | --- | --- | --- | 16 |
| 17 | --- | --- | --- | 238.610 | 238.181E | 239.229E | 239.214 | 239.141 | --- | --- | --- | --- | 17 |
| 18 | --- | --- | --- | 238.338 | 238.211 | 239.226 | 239.208E | 239.183E | --- | --- | --- | --- | 18 |
| 19 | --- | --- | --- | 238.366E | 238.207E | 239.208E | 239.204 | 239.184 | --- | --- | --- | --- | 19 |
| 20 | --- | --- | --- | 238.431E | 238.203E | 239.182 | 239.186E | 239.182E | --- | --- | --- | --- | 20 |
| 21 | --- | --- | --- | 238.477 | 238.188E | 239.183E | 238.187 | 239.180E | --- | 238.182 | --- | --- | 21 |
| 22 | --- | --- | --- | 239.443E | 239.184 | 239.173 | 239.174 | 239.178E | --- | --- | --- | --- | 22 |
| 23 | --- | --- | --- | 238.409E | 239.204E | 239.156 | 239.184 | 239.177 | 238.181 | --- | --- | --- | 23 |
| 24 | --- | --- | --- | 238.375 | 238.214 | 238.157E | 239.157 | 239.173E | 238.187 | --- | --- | --- | 24 |
| 25 | --- | --- | --- | 238.309 | 238.208E | 239.156 | 239.149 | 239.188E | 238.174E | --- | --- | --- | 25 |
| 26 | --- | --- | --- | 238.302E | 238.201E | 238.180E | 238.148E | 238.183E | 238.180 | --- | --- | --- | 26 |
| 27 | --- | --- | --- | 238.295 | 238.188E | 238.143 | 238.147 | 238.189 | 238.184E | --- | --- | --- | 27 |
| 28 | --- | --- | --- | 238.277E | 238.184 | 238.148E | 238.143E | 238.184E | 238.187E | --- | --- | --- | 28 |
| 29 | --- | --- | --- | 238.258E | 238.182E | 238.153 | 238.138 | 238.184E | 238.171E | --- | --- | --- | 29 |
| 30 | --- | --- | --- | 238.241 | 238.187E | 238.158E | 238.151E | 238.173 | 238.174E | --- | --- | --- | 30 |
| 31 | --- | | --- | | 238.201 | | 238.162E | 238.174E | | --- | --- | --- | 31 |
| MEAN | --- | --- | --- | --- | 238.187 | 238.187 | 238.188 | 238.181 | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 239.214 | 239.287 | 239.218 | 239.184 | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 238.110 | 239.143 | 239.138 | 239.138 | --- | --- | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 54 05 N
LONG 97 45 52 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1982

DRAINAGE AREA,
192 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## LA SALLE RIVER NEAR SANFORD - STATION NO. 05OC001

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.1758 | 0.1038 | 0.0585 | 0.0388 | 1.02 | 0.486 | 0.478 | 0.208 | 0.084 | 0.267 | 0.210 | 0.1508 | 1 |
| 2 | 0.1728 | 0.0848 | 0.0458 | 0.0308 | 0.771 | 0.842 | 0.436 | 0.182 | 0.081 | 0.182 | 0.186 | 0.1638 | 2 |
| 3 | 0.1608 | 0.0808 | 0.0348 | 0.0388 | 0.570 | 0.668 | 0.426 | 0.082 | 0.078 | 0.183 | 0.2328 | 0.1858 | 3 |
| 4 | 0.1568 | 0.0648 | 0.0188 | 0.1178 | 0.411 | 0.585 | 0.447 | 0.058 | 0.077 | 0.170 | 0.2818 | 0.1788 | 4 |
| 5 | 0.1528 | 0.0738 | 0.0128 | 0.8888 | 0.288 | 0.884 | 0.513 | 0.034 | 0.085 | 0.183 | 0.3138 | 0.1788 | 5 |
| 6 | 0.1758 | 0.0758 | 0.0088 | 0.8288 | 0.092 | 0.715 | 0.490 | 0.056 | 0.088 | 0.181 | 0.3308 | 0.1558 | 6 |
| 7 | 0.2488 | 0.0878 | 0.0088 | 0.7268 | 0.057 | 0.812 | 0.433 | 0.086 | 0.086 | 0.138 | 0.3328 | 0.1358 | 7 |
| 8 | 0.2488 | 0.0718 | 0.0278 | 0.4848 | 0.076 | 0.727 | 0.480 | 0.092 | 0.138 | 0.126 | 0.3278 | 0.1258 | 8 |
| 9 | 0.1708 | 0.0628 | 0.0368 | 0.3568 | 0.083 | 0.888 | 0.848 | 0.104 | 0.114 | 0.153 | 0.3088 | 0.1838 | 9 |
| 10 | 0.1488 | 0.0578 | 0.0418 | 0.3248 | 0.088 | 0.882 | 0.821 | 0.082 | 0.108 | 0.172 | 0.2818 | 0.1408 | 10 |
| 11 | 0.1338 | 0.0888 | 0.0488 | 0.4808 | 0.041 | 0.730 | 0.488 | 0.074 | 0.101 | 0.283 | 0.2828 | 0.1288 | 11 |
| 12 | 0.1088 | 0.0918 | 0.0568 | 0.8808 | 0.038 | 1.08 | 0.886 | 0.087 | 0.088 | 0.300 | 0.2378 | 0.0848 | 12 |
| 13 | 0.1088 | 0.0868 | 0.0648 | 0.7448 | 0.048 | 1.88 | 0.847 | 0.042 | 0.088 | 0.263 | 0.2248 | 0.1048 | 13 |
| 14 | 0.1208 | 0.1028 | 0.0678 | 4.88 B | 0.087 | 2.30 | 0.583 | 0.032 | 0.141 | 0.224 | 0.2088 | 0.1058 | 14 |
| 15 | 0.1108 | 0.1158 | 0.0748 | 6.23 B | 0.087 | 1.78 | 0.861 | 0.024 | 0.158 | 0.239 | 0.2038 | 0.0888 | 15 |
| 16 | 0.1178 | 0.0888 | 0.0638 | 11.9 B | 0.108 | 1.22 | 0.518 | 0.017 | 0.173 | 0.207 | 0.1858 | 0.0848 | 16 |
| 17 | 0.1308 | 0.0838 | 0.0588 | 14.3 B | 0.110 | 0.878 | 0.481 | 0.008 | 0.172 | 0.213 | 0.1838 | 0.0788 | 17 |
| 18 | 0.1428 | 0.0738 | 0.0508 | 13.7 B | 0.151 | 0.717 | 0.461 | 0.034 | 0.182 | 0.183 | 0.1728 | 0.0648 | 18 |
| 19 | 0.1558 | 0.0538 | 0.0388 | 13.5 B | 0.241 | 0.606 | 0.448 | 0.227 | 0.185 | 0.180 | 0.1638 | 0.0888 | 19 |
| 20 | 0.1308 | 0.0458 | 0.0238 | 13.9 B | 0.298 | 0.618 | 0.455 | 0.324 | 0.144 | 0.207 | 0.1788 | 0.0888 | 20 |
| 21 | 0.1408 | 0.0418 | 0.0128 | 17.5 B | 0.248 | 0.552 | 0.467 | 0.310 | 0.181 | 0.188 | 0.1308 | 0.0828 | 21 |
| 22 | 0.1278 | 0.0488 | 0.0088 | 24.4 B | 0.244 | 0.493 | 0.414 | 0.328 | 0.161 | 0.158 | 0.1188 | 0.0788 | 22 |
| 23 | 0.1208 | 0.0388 | 0.0078 | 32.8 | 0.232 | 0.498 | 0.378 | 0.271 | 0.183 | 0.173 | 0.1308 | 0.0788 | 23 |
| 24 | 0.1108 | 0.0428 | 0.0038 | 17.8 | 0.228 | 0.572 | 0.398 | 0.186 | 0.207 | 0.198 | 0.1428 | 0.0888 | 24 |
| 25 | 0.1228 | 0.0538 | 0.0058 | 9.88 | 0.303 | 0.818 | 0.457 | 0.102 | 0.253 | 0.198 | 0.1508 | 0.1058 | 25 |
| 26 | 0.1308 | 0.0748 | 0.0088 | 6.18 | 0.338 | 0.832 | 0.381 | 0.075 | 0.228 | 0.207 | 0.1478 | 0.1058 | 26 |
| 27 | 0.1178 | 0.0888 | 0.0188 | 3.81 | 0.285 | 0.532 | 0.307 | 0.048 | 0.231 | 0.188 | 0.1428 | 0.1178 | 27 |
| 28 | 0.1308 | 0.0748 | 0.0388 | 2.40 | 0.308 | 0.834 | 0.221 | 0.043 | 0.288 | 0.247 | 0.1428 | 0.1088 | 28 |
| 29 | 0.1258 | | 0.0488 | 1.88 | 0.278 | 0.543 | 0.143 | 0.082 | 0.235 | 0.232 | 0.1588 | 0.1038 | 29 |
| 30 | 0.1228 | | 0.0508 | 1.33 | 0.318 | 0.541 | 0.183 | 0.044 | 0.222 | 0.242 | 0.1558 | 0.1108 | 30 |
| 31 | 0.1488 | | 0.0488 | | 0.381 | | 0.282 | 0.085 | | 0.248 | | 0.1308 | 31 |
| TOTAL | 4.433 | 1.998 | 1.053 | 205.983 | 7.808 | 23.805 | 13.871 | 3.318 | 4.408 | 6.298 | 5.248 | 3.588 | TOTAL |
| MEAN | 0.143 | 0.071 | 0.034 | 6.87 | 0.252 | 0.787 | 0.441 | 0.107 | 0.147 | 0.203 | 0.308 | 0.116 | MEAN |
| MAX | 0.248 | 0.115 | 0.074 | 32.8 | 1.02 | 2.30 | 0.886 | 0.328 | 0.288 | 0.300 | 0.332 | 0.178 | MAX |
| MIN | 0.108 | 0.038 | 0.003 | 0.838 | 0.038 | 0.486 | 0.143 | 0.008 | 0.081 | 0.128 | 0.118 | 0.075 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.774
MAXIMUM DAILY, 32.8 ON APR 23
MINIMUM DAILY, 0.0038 ON MAR 24
MAXIMUM INSTANTANEOUS,
35.8 AT 04:83 CST ON APR 23

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 48 40 45 N
LONG 97 25 48 W
DRAINAGE AREA, 1 820 km²

B - ICE CONDITIONS

REGULATED SINCE 1964

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 383 | JUL 1 | 180 |
| FEB | 172 | AUG | 287 |
| MAR | 81.0 | SEP | 381 |
| APR 17 | 800 | OCT | 544 |
| MAY | 674 | NOV | 520 |
| JUN | 2 040 | DEC | 311 |

TOTAL DISCHARGE, 24 400 dam³

## LAKE IRWIN NEAR NEEPAWA - STATION NO. 05LL010

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | 358.487 | 359.068 | 359.018 | 359.038 | 358.804 | 358.478 | 358.173 | 358.081 | 358.113 | 1 |
| 2 | --- | --- | --- | 358.531 | 359.085 | 359.014 | 359.037 | 358.783 | 358.477 | 358.185 | 358.081 | 358.114 | 2 |
| 3 | --- | --- | --- | 358.580 | 359.087 | 359.008 | 359.031 | 358.763 | 358.476 | 358.185 | 358.082 | 358.111 | 3 |
| 4 | --- | --- | --- | 358.624 | 359.051 | 359.004 | 359.028 | 358.748 | 358.468 | 358.147 | 358.083 | 358.118 | 4 |
| 5 | --- | --- | --- | 358.687 | 359.048 | 358.998 | 359.026 | 358.760 | 358.459 | 358.141 | 358.084 | 358.114 | 5 |
| 6 | --- | --- | --- | 358.712 | 359.050 | 358.998 | 359.018 | 358.740 | 358.449 | 358.135 | 358.088 | 358.115 | 6 |
| 7 | --- | --- | --- | 358.758 | 359.051 | 358.999 | 359.016 | 358.728 | 358.435 | 358.130 | 358.093 | 358.114 | 7 |
| 8 | --- | --- | --- | 358.767 | 359.050 | 359.001 | 359.012 | 358.711 | 358.427 | 358.124 | 358.104 | 358.114 | 8 |
| 9 | 358.180A | --- | --- | 358.811 | 359.052 | 359.002 | 359.018 | 358.698 | 358.420 | 358.118 | 358.107 | 358.120 | 9 |
| 10 | --- | --- | --- | 358.840 | 359.054 | 359.002 | 359.015 | 358.680 | 358.418 | 358.112 | 358.113 | 358.118 | 10 |
| 11 | --- | --- | --- | 358.880 | 358.057 | 359.002 | 359.008 | 358.662 | 358.403 | 358.098 | 358.116 | --- | 11 |
| 12 | --- | --- | --- | 358.878 | 359.043 | 359.007 | 359.012 | 358.648 | 358.395 | 358.083 | 358.118 | --- | 12 |
| 13 | --- | --- | --- | 358.804 | 359.035 | 359.055 | 359.011 | 358.650 | 358.384 | 358.085 | 358.122 | --- | 13 |
| 14 | --- | --- | --- | 358.823 | 359.033 | 359.077 | 359.008A | 358.645 | 358.374 | 358.085 | 358.124 | --- | 14 |
| 15 | --- | --- | --- | 358.848 | 359.034 | 359.080 | 358.992E | 358.639 | 358.362 | 358.088 | 358.130 | --- | 15 |
| 16 | --- | --- | --- | 358.872 | 359.031 | 359.081 | 358.983E | 358.628 | 358.351 | 358.092 | 358.130 | --- | 16 |
| 17 | --- | --- | --- | 358.867 | 359.031 | 359.082 | 358.973A | 358.612 | 358.342 | 358.088 | 358.128 | --- | 17 |
| 18 | --- | --- | --- | 359.007 | 359.030 | 359.077 | 358.966 | 358.613 | 358.322 | 358.089 | 358.128 | --- | 18 |
| 19 | --- | --- | --- | 359.023 | 359.028 | 359.071 | 358.959 | 358.601 | 358.321 | 358.083 | 358.123 | --- | 19 |
| 20 | --- | --- | --- | 359.038 | 359.022 | 359.067 | 358.948 | 358.587 | 358.314 | 358.081 | 358.124 | --- | 20 |
| 21 | --- | --- | 358.327 | 359.051 | 359.021 | 359.052 | 358.933 | 358.580 | 358.301 | 358.078 | 358.124 | --- | 21 |
| 22 | --- | --- | 358.334 | 359.059 | 359.018 | 359.046 | 358.918 | 358.570 | 358.283 | 358.077 | 358.126 | --- | 22 |
| 23 | --- | --- | 358.338 | 359.065 | 359.021 | 359.041 | 358.905 | 358.557 | 358.277 | 358.074 | 358.128 | --- | 23 |
| 24 | --- | --- | 358.343 | 359.078 | 359.021 | 359.035 | 358.892 | 358.548 | 358.256 | 358.074 | 358.125 | --- | 24 |
| 25 | --- | --- | 358.352 | 359.081 | 359.020 | 359.028 | 358.878 | 358.545 | 358.244 | 358.071 | 358.123 | --- | 25 |
| 26 | --- | --- | 358.387 | 358.081 | 359.025 | 359.018 | 358.866 | 358.528 | 358.238 | 358.088 | 358.123 | --- | 26 |
| 27 | --- | 358.278A | 358.415 | 358.079 | 359.026 | 359.009 | 358.854 | 358.515 | 358.228 | 358.078 | 358.121 | --- | 27 |
| 28 | --- | --- | 358.437 | 359.074 | 359.027 | 359.009 | 358.842 | 358.508 | 358.209 | 358.077 | 358.119 | --- | 28 |
| 29 | --- | | 358.461 | 359.071 | 359.026 | 359.022 | 358.833 | 358.506 | 358.203 | 358.078 | 358.117 | --- | 29 |
| 30 | --- | | 358.472 | 359.070 | 359.027 | 359.031 | 358.823 | 358.498 | 358.185 | 358.080 | 358.113 | --- | 30 |
| 31 | --- | | 358.478A | | 359.024 | | 358.814 | 358.487 | | 358.080 | | --- | 31 |
| MEAN | --- | --- | --- | 358.802 | 359.037 | 358.031 | 358.857 | 358.631 | 358.350 | 358.101 | 358.113 | --- | MEAN |
| MAX | --- | --- | --- | 359.081 | 359.088 | 359.081 | 359.038 | 358.804 | 358.478 | 358.173 | 358.130 | --- | MAX |
| MIN | --- | --- | --- | 358.487 | 359.018 | 358.998 | 358.814 | 358.487 | 358.185 | 358.088 | 358.081 | --- | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MAXIMUM DAILY, 359.081 ON JUN 16
MINIMUM DAILY, 358.088 ON OCT 28
MAXIMUM INSTANTANEOUS,
359.095 AT 17:20 CST ON JUN 15

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 13 48 N
LONG 99 26 36 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED SINCE 1980

DRAINAGE AREA,
850 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

REMARKS - PREVIOUS TO 1988 PUBLISHED UNDER THE NAME "NEEPAWA RESERVOIR NEAR NEEPAWA"

## LAKE MANITOBA AT STEEP ROCK - STATION NO. 05LK002

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 247.397 | 247.418 | 247.421 | 247.433 | 247.451 | 247.488 | 247.500 | 247.463 | 247.437 | 247.281 | 247.300 | 247.378 | 1 |
| 2 | 247.388 | 247.420 | 247.422 | 247.432 | 247.458 | 247.453 | 247.514 | 247.488 | 247.448 | 247.295 | 247.327 | 247.383 | 2 |
| 3 | 247.405 | 247.423 | 247.424 | 247.425 | 247.449 | 247.459 | 247.507 | 247.486 | 247.481 | 247.320 | 247.405 | 247.377 | 3 |
| 4 | 247.408 | 247.423 | 247.421 | 247.427 | 247.458 | 247.487 | 247.583 | 247.497 | 247.479 | 247.336 | 247.389 | 247.370 | 4 |
| 5 | 247.410 | 247.420 | 247.420 | 247.432 | 247.402 | 247.473 | 247.562 | 247.426 | 247.488 | 247.326 | 247.344 | 247.389 | 5 |
| 6 | 247.396 | 247.422 | 247.420 | 247.433 | 247.414 | 247.470 | 247.550 | 247.403 | 247.454 | 247.320 | 247.373 | 247.386 | 6 |
| 7 | 247.394 | 247.421 | 247.422 | 247.433 | 247.465 | 247.425 | 247.587 | 247.407 | 247.487 | 247.317 | 247.374 | 247.358 | 7 |
| 8 | 247.392 | 247.418 | 247.421 | 247.433 | 247.447 | 247.453 | 247.573 | 247.419 | 247.473 | 247.381 | 247.340 | 247.381 | 8 |
| 9 | 247.388 | 247.415 | 247.424 | 247.432 | 247.454 | 247.478 | 247.558 | 247.430 | 247.425 | 247.347 | 247.353 | 247.342 | 9 |
| 10 | 247.401 | 247.417 | 247.424 | 247.435 | 247.482 | 247.492 | 247.530 | 247.443 | 247.410 | 247.359 | 247.383 | 247.347 | 10 |
| 11 | 247.401 | 247.418 | 247.422 | 247.434 | 247.495 | 247.493 | 247.525 | 247.445 | 247.378 | 247.372 | 247.333 | 247.345 | 11 |
| 12 | 247.389 | 247.422 | 247.422 | 247.437 | 247.515 | 247.387 | 247.536 | 247.440 | 247.387 | 247.385 | 247.351 | 247.338 | 12 |
| 13 | 247.400 | 247.423 | 247.425 | 247.441 | 247.522 | 247.404 | 247.536 | 247.396 | 247.421 | 247.351 | 247.348 | 247.340 | 13 |
| 14 | 247.403 | 247.423 | 247.423 | 247.432 | 247.516 | 247.477 | 247.539 | 247.389 | 247.411 | 247.339 | 247.355 | 247.341 | 14 |
| 15 | 247.389 | 247.422 | 247.423 | 247.439 | 247.498 | 247.513 | 247.540 | 247.409 | 247.425 | 247.305 | 247.344 | 247.345 | 15 |
| 16 | 247.401 | 247.424 | 247.431 | 247.438 | 247.498 | 247.544 | 247.546 | 247.414 | 247.413 | 247.332 | 247.350 | 247.347 | 16 |
| 17 | 247.401 | 247.428 | 247.418 | 247.438 | 247.502 | 247.581 | 247.551 | 247.438 | 247.431 | 247.328 | 247.357 | 247.347 | 17 |
| 18 | 247.401 | 247.431 | 247.418 | 247.438 | 247.520 | 247.586 | 247.541 | 247.478 | 247.388 | 247.373 | 247.381 | 247.350 | 18 |
| 19 | 247.404 | 247.432 | 247.414 | 247.437 | 247.525 | 247.582 | 247.530 | 247.432 | 247.397 | 247.408 | 247.370 | 247.357 | 19 |
| 20 | 247.408 | 247.430 | 247.413 | 247.433 | 247.552 | 247.611 | 247.533 | 247.406 | 247.411 | 247.377 | 247.383 | 247.355 | 20 |
| 21 | 247.410 | 247.422 | 247.412 | 247.438 | 247.528 | 247.594 | 247.539 | 247.428 | 247.408 | 247.392 | 247.388 | 247.383 | 21 |
| 22 | 247.408 | 247.422 | 247.412 | 247.445 | 247.508 | 247.556 | 247.551 | 247.433 | 247.359 | 247.387 | 247.370 | 247.382 | 22 |
| 23 | 247.411 | 247.428 | 247.410 | 247.453 | 247.478 | 247.545 | 247.581 | 247.452 | 247.393 | 247.377 | 247.367 | 247.374 | 23 |
| 24 | 247.412 | 247.425 | 247.414 | 247.450 | 247.450 | 247.554 | 247.543 | 247.508 | 247.393 | 247.377 | 247.370 | 247.381 | 24 |
| 25 | 247.414 | 247.420 | 247.417 | 247.452 | 247.420 | 247.556 | 247.525 | 247.530 | 247.388 | 247.382 | 247.375 | 247.374 | 25 |
| 26 | 247.414 | 247.418 | 247.418 | 247.444 | 247.432 | 247.583 | 247.495 | 247.538 | 247.388 | 247.357 | 247.372 | 247.388 | 26 |
| 27 | 247.422 | 247.422 | 247.414 | 247.438 | 247.464 | 247.567 | 247.461 | 247.505 | 247.402 | 247.373 | 247.377 | 247.385 | 27 |
| 28 | 247.423 | 247.421 | 247.413 | 247.441 | 247.420 | 247.556 | 247.453 | 247.468 | 247.386 | 247.398 | 247.374 | 247.372 | 28 |
| 29 | 247.426 | | 247.418 | 247.428 | 247.452 | 247.574 | 247.468 | 247.467 | 247.381 | 247.385 | 247.381 | 247.383 | 29 |
| 30 | 247.418 | | 247.422 | 247.441 | 247.484 | 247.582 | 247.470 | 247.467 | 247.378 | 247.348 | 247.377 | 247.377 | 30 |
| 31 | 247.413 | | 247.429 | | 247.478 | | 247.466 | 247.440 | | 247.325 | | 247.373 | 31 |
| MEAN | 247.406 | 247.422 | 247.418 | 247.437 | 247.474 | 247.518 | 247.537 | 247.450 | 247.418 | 247.351 | 247.381 | 247.381 | MEAN |
| MAX | 247.426 | 247.432 | 247.429 | 247.453 | 247.552 | 247.611 | 247.618 | 247.538 | 247.487 | 247.409 | 247.408 | 247.383 | MAX |
| MIN | 247.382 | 247.415 | 247.410 | 247.425 | 247.402 | 247.387 | 247.441 | 247.385 | 247.359 | 247.281 | 247.300 | 247.338 | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MEAN, 247.428
MAXIMUM DAILY, 247.618 ON JUL 2
MINIMUM DAILY, 247.281 ON OCT 1
MAXIMUM INSTANTANEOUS,
247.684 AT 03:15 CST ON JUN 20

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 26 26 N
LONG 98 48 13 W

REGULATED SINCE 1934

DRAINAGE AREA,
79 900 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1984 ADJ.)

## LAKE MANITOBA AT THE NARROWS - STATION NO 05LK003

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 247.387 | 247.407 | 247.408 | 247.411E | 247.441 | 247.448 | 247.534 | 247.418 | 247.380 | 247.071 | 247.257 | 247.356 | 1 |
| 2 | 247.384 | 247.409 | 247.407 | 247.410E | 247.431 | 247.373 | 247.470 | 247.424 | 247.400 | 247.208 | 247.345 | 247.352 | 2 |
| 3 | 247.395 | 247.411 | 247.404 | 247.410E | 247.425 | 247.391 | 247.465 | 247.416 | 247.417 | 247.342 | 247.557 | 247.351 | 3 |
| 4 | 247.398 | 247.414 | 247.403 | 247.412E | 247.321 | 247.451 | 247.508 | 247.414 | 247.388 | 247.358 | 247.319 | 247.358 | 4 |
| 5 | 247.398 | 247.418 | 247.404 | 247.412E | 247.182 | 247.436 | 247.482 | 247.227 | 247.390 | 247.288 | 247.285 | 247.351 | 5 |
| 6 | 247.394 | 247.418 | 247.405 | 247.413A | 247.480 | 247.448 | 247.448 | 247.348 | 247.388 | 247.201 | 247.380 | 247.355A | 6 |
| 7 | 247.378 | 247.412 | 247.407 | 247.414 | 247.483 | 247.382 | 247.503 | 247.388 | 247.394 | 247.352 | 247.348 | 247.352E | 7 |
| 8 | 247.388 | 247.412 | 247.405 | 247.415 | 247.437 | 247.449 | 247.492 | 247.403 | 247.343 | 247.378 | 247.247 | 247.350A | 8 |
| 9 | 247.398 | 247.415 | 247.408 | 247.413 | 247.455 | 247.488 | 247.471 | 247.420 | 247.302 | 247.288 | 247.348 | 247.351 | 9 |
| 10 | 247.398 | 247.416 | 247.407 | 247.416 | 247.471 | 247.482 | 247.447 | 247.408 | 247.373 | 247.350 | 247.354 | 247.354 | 10 |
| 11 | 247.401 | 247.415 | 247.406 | 247.416 | 247.542 | 247.477 | 247.481 | 247.408 | 247.342 | 247.290 | 247.182 | 247.357 | 11 |
| 12 | 247.405 | 247.415 | 247.405 | 247.416 | 247.491 | 247.206 | 247.457 | 247.387 | 247.383 | 247.324 | 247.359 | 247.358 | 12 |
| 13 | 247.410 | 247.413 | 247.413 | 247.416 | 247.444 | 247.420 | 247.482 | 247.350 | 247.410 | 247.348 | 247.335 | 247.354 | 13 |
| 14 | 247.407 | 247.410 | 247.408 | 247.417 | 247.457 | 247.515 | 247.485 | 247.384 | 247.394 | 247.326 | 247.359 | 247.350 | 14 |
| 15 | 247.405 | 247.410 | 247.411 | 247.418 | 247.442 | 247.536 | 247.488 | 247.380 | 247.410 | 247.239 | 247.278 | 247.357 | 15 |
| 16 | 247.404 | 247.411 | 247.410 | 247.416 | 247.481 | 247.558 | 247.494 | 247.385 | 247.370 | 247.318 | 247.351 | 247.356 | 16 |
| 17 | 247.404 | 247.408 | 247.411 | 247.418 | 247.482 | 247.523 | 247.486 | 247.413 | 247.440 | 247.295 | 247.341 | 247.352 | 17 |
| 18 | 247.408 | 247.411 | 247.410 | 247.418 | 247.483 | 247.508 | 247.459 | 247.443 | 247.287 | 247.357 | 247.357 | 247.352 | 18 |
| 19 | 247.405 | 247.411 | 247.409 | 247.418 | 247.468 | 247.530 | 247.470 | 247.287 | 247.385 | 247.399 | 247.357 | 247.353 | 19 |
| 20 | 247.412 | 247.409 | 247.408 | 247.418 | 247.482 | 247.518 | 247.488 | 247.291 | 247.378 | 247.320 | 247.320 | 247.352 | 20 |
| 21 | 247.410 | 247.405 | 247.410 | 247.417 | 247.457 | 247.468 | 247.490 | 247.384 | 247.378 | 247.278 | 247.357 | 247.351 | 21 |
| 22 | 247.408 | 247.407 | 247.412A | 247.421 | 247.454 | 247.457 | 247.484 | 247.372 | 247.128 | 247.326 | 247.335 | 247.350 | 22 |
| 23 | 247.407 | 247.414 | 247.412E | 247.423 | 247.451 | 247.496 | 247.484 | 247.384 | 247.402 | 247.318 | 247.353 | 247.354 | 23 |
| 24 | 247.408 | 247.407 | 247.411E | 247.419 | 247.438 | 247.501 | 247.488 | 247.434 | 247.387 | 247.358 | 247.357 | 247.354 | 24 |
| 25 | 247.410 | 247.404 | 247.410E | 247.431 | 247.203 | 247.517 | 247.428 | 247.434 | 247.278 | 247.324 | 247.355 | 247.351 | 25 |
| 26 | 247.416 | 247.405 | 247.411E | 247.424 | 247.404 | 247.510 | 247.373 | 247.346 | 247.410 | 247.290 | 247.355 | 247.356 | 26 |
| 27 | 247.415 | 247.411 | 247.410E | 247.423 | 247.489 | 247.452 | 247.373 | 247.365 | 247.403 | 247.328 | 247.352 | 247.357 | 27 |
| 28 | 247.413 | 247.406 | 247.410E | 247.421 | 247.390 | 247.548 | 247.458 | 247.383 | 247.314 | 247.325 | 247.355 | 247.352 | 28 |
| 29 | 247.414 | | 247.410E | 247.410 | 247.468 | 247.484 | 247.425 | 247.221 | 247.371 | 247.307 | 247.356 | 247.352 | 29 |
| 30 | 247.409 | | 247.411E | 247.434 | 247.489 | 247.499 | 247.418 | 247.400 | 247.357 | 247.344 | 247.359 | 247.353 | 30 |
| 31 | 247.404 | | 247.411E | | 247.442 | | 247.420 | 247.382 | | 247.317 | | 247.355 | 31 |
| MEAN | 247.403 | 247.411 | 247.409 | 247.417 | 247.435 | 247.487 | 247.485 | 247.375 | 247.384 | 247.311 | 247.339 | 247.354 | MEAN |
| MAX | 247.416 | 247.416 | 247.413 | 247.434 | 247.542 | 247.558 | 247.534 | 247.443 | 247.440 | 247.399 | 247.557 | 247.383 | MAX |
| MIN | 247.378 | 247.404 | 247.403 | 247.410 | 247.182 | 247.206 | 247.373 | 247.221 | 247.126 | 247.071 | 247.182 | 247.350 | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MEAN, 247.386
MAXIMUM DAILY, 247.558 ON JUN 18
MINIMUM DAILY, 247.071 ON OCT 1
MAXIMUM INSTANTANEOUS,
247.742 AT 05:55 CST ON NOV 3

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 04 50 N
LONG 99 46 50 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED SINCE 1934

DRAINAGE AREA,
79 900 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1964 ADJ.)

## LAKE MANITOBA NEAR TOUTES AIDES - STATION NO. 05LK004

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 247.312 | 247.335 | 247.330 | 247.336 | 247.382 | 247.382 | 247.564 | 247.430 | 247.327 | 247.348 | 247.243 | 247.288 | 1 |
| 2 | 247.321 | 247.337 | 247.334 | 247.336 | 247.373 | 247.375 | 247.513 | 247.438 | 247.340 | 247.186 | 247.181 | 247.287 | 2 |
| 3 | 247.326 | 247.343 | 247.336 | 247.332 | 247.386 | 247.344 | 247.456 | 247.419 | 247.400 | 247.128 | 247.248 | 247.284 | 3 |
| 4 | 247.335 | 247.347 | 247.332 | 247.328 | 247.382 | 247.333 | 247.492 | 247.396 | 247.369 | 247.175 | 247.311 | 247.285 | 4 |
| 5 | 247.334 | 247.350 | 247.328 | 247.326 | 247.386 | 247.388 | 247.496 | 247.359 | 247.346 | 247.217 | 247.274 | 247.274 | 5 |
| 6 | 247.327 | 247.347 | 247.333 | 247.328 | 247.337 | 247.416 | 247.437 | 247.293 | 247.380 | 247.114 | 247.278 | 247.288 | 6 |
| 7 | 247.315 | 247.341 | 247.343 | 247.331 | 247.373 | 247.441 | 247.482 | 247.288 | 247.307 | 247.131 | 247.289 | 247.274 | 7 |
| 8 | 247.307 | 247.334 | 247.336 | 247.325 | 247.387 | 247.386 | 247.486 | 247.286 | 247.258 | 247.188 | 247.283 | 247.277 | 8 |
| 9 | 247.317 | 247.344 | 247.343 | 247.325 | 247.373 | 247.398 | 247.486 | 247.341 | 247.259 | 247.214 | 247.274 | 247.270 | 9 |
| 10 | 247.324 | 247.345 | 247.344 | 247.330 | 247.389 | 247.439 | 247.470 | 247.388 | 247.250 | 247.224 | 247.268 | 247.268 | 10 |
| 11 | 247.334 | 247.345 | 247.335 | 247.335 | 247.435 | 247.508 | 247.489 | 247.382 | 247.275 | 247.218 | 247.197 | 247.272 | 11 |
| 12 | 247.335 | 247.347 | 247.333 | 247.345 | 247.515 | 247.500 | 247.485 | 247.411 | 247.223 | 247.211 | 247.237 | 247.278 | 12 |
| 13 | 247.345 | 247.345 | 247.334 | 247.347 | 247.503 | 247.438 | 247.443 | 247.406 | 247.252 | 247.273 | 247.248 | 247.275 | 13 |
| 14 | 247.351 | 247.341 | 247.332 | 247.340 | 247.456 | 247.385 | 247.438 | 247.338 | 247.317 | 247.319 | 247.258 | 247.273 | 14 |
| 15 | 247.340 | 247.336 | 247.333 | 247.344 | 247.422 | 247.421 | 247.433 | 247.328 | 247.338 | 247.318 | 247.281 | 247.274 | 15 |
| 16 | 247.348 | 247.338 | 247.327 | 247.338 | 247.388 | 247.487 | 247.486 | 247.363 | 247.330 | 247.294 | 247.287 | 247.272 | 16 |
| 17 | 247.344 | 247.339 | 247.328 | 247.336 | 247.439 | 247.530 | 247.485 | 247.401 | 247.403 | 247.245 | 247.258 | 247.288 | 17 |
| 18 | 247.343 | 247.342 | 247.332 | 247.337 | 247.438 | 247.489 | 247.489 | 247.425 | 247.365 | 247.198 | 247.268 | 247.272 | 18 |
| 19 | 247.343 | 247.347 | 247.335 | 247.340 | 247.468 | 247.520 | 247.448 | 247.406 | 247.295 | 247.258 | 247.281 | 247.266 | 19 |
| 20 | 247.345 | 247.343 | 247.328 | 247.342 | 247.413 | 247.543 | 247.484 | 247.308 | 247.322 | 247.293 | 247.280 | 247.283 | 20 |
| 21 | 247.352 | 247.337 | 247.331 | 247.348 | 247.427 | 247.478 | 247.482 | 247.352 | 247.285 | 247.325 | 247.273 | 247.283 | 21 |
| 22 | 247.350 | 247.335 | 247.333 | 247.363 | 247.417 | 247.455 | 247.500 | 247.394 | 247.234 | 247.320 | 247.281 | 247.286 | 22 |
| 23 | 247.338 | 247.347 | 247.330 | 247.378 | 247.425 | 247.458 | 247.528 | 247.423 | 247.189 | 247.301 | 247.278 | 247.280 | 23 |
| 24 | 247.337 | 247.350 | 247.335 | 247.384 | 247.468 | 247.484 | 247.505 | 247.448 | 247.272 | 247.321 | 247.287 | 247.282 | 24 |
| 25 | 247.340 | 247.340 | 247.338 | 247.381 | 247.428 | 247.498 | 247.478 | 247.471 | 247.181 | 247.307 | 247.284 | 247.278 | 25 |
| 26 | 247.348 | 247.332 | 247.339 | 247.356 | 247.300 | 247.543 | 247.416 | 247.390 | 247.225 | 247.309 | 247.288 | 247.284 | 26 |
| 27 | 247.355 | 247.336 | 247.332 | 247.353 | 247.332 | 247.501 | 247.383 | 247.386 | 247.302 | 247.305 | 247.275 | 247.284 | 27 |
| 28 | 247.353 | 247.332 | 247.327 | 247.345 | 247.383 | 247.563 | 247.419 | 247.448 | 247.275 | 247.209 | 247.275 | 247.278 | 28 |
| 29 | 247.356 | | 247.326 | 247.347 | 247.348 | 247.559 | 247.462 | 247.411 | 247.274 | 247.218 | 247.285 | 247.274 | 29 |
| 30 | 247.357 | | 247.327 | 247.340 | 247.380 | 247.507 | 247.415 | 247.367 | 247.337 | 247.204 | 247.282 | 247.280 | 30 |
| 31 | 247.344 | | 247.333 | | 247.383 | | 247.415 | 247.383 | | 247.298 | | 247.278 | 31 |
| MEAN | 247.338 | 247.341 | 247.333 | 247.342 | 247.401 | 247.481 | 247.487 | 247.381 | 247.288 | 247.247 | 247.265 | 247.278 | MEAN |
| MAX | 247.357 | 247.350 | 247.344 | 247.378 | 247.515 | 247.500 | 247.564 | 247.471 | 247.403 | 247.348 | 247.311 | 247.288 | MAX |
| MIN | 247.307 | 247.332 | 247.326 | 247.325 | 247.300 | 247.333 | 247.383 | 247.288 | 247.189 | 247.114 | 247.181 | 247.283 | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MEAN, 247.346
MAXIMUM DAILY, 247.800 ON JUN 12
MINIMUM DAILY, 247.114 ON OCT 6
MAXIMUM INSTANTANEOUS,
247.702 AT 18:35 CST ON JUN 12

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 31 18 N
LONG 99 32 23 W

REGULATED SINCE 1934

DRAINAGE AREA,
79 900 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM 1928 ADJUSTMENT

## LAKE MANITOBA NEAR WESTBOURNE - STATION NO. 05LL012

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 247.371 | 247.392 | 247.392 | 247.449 | 247.780 | 247.488 | 247.522 | 247.448 | 247.402 | 247.486 | 247.432 | 247.343 | 1 |
| 2 | 247.373 | 247.392 | 247.390 | 247.443 | 247.781 | 247.462 | 247.513 | 247.446 | 247.384 | 247.456 | 247.361 | 247.340 | 2 |
| 3 | 247.367 | 247.381 | 247.384 | 247.467 | 247.786 | 247.543 | 247.548 | 247.453 | 247.330 | 247.380 | 247.174 | 247.341 | 3 |
| 4 | 247.389 | 247.388 | 247.384 | 247.478 | 247.682 | 247.445 | 247.530 | 247.378 | 247.324 | 247.331 | 247.335 | 247.339 | 4 |
| 5 | 247.388 | 247.381 | 247.387 | 247.488 | 247.585 | 247.480 | 247.536 | 247.800 | 247.384 | 247.418 | 247.370 | 247.344 | 5 |
| 6 | 247.377 | 247.384 | 247.403 | 247.488 | 247.693 | 247.538 | 247.606 | 247.500 | 247.370 | 247.481 | 247.310 | 247.344 | 6 |
| 7 | 247.385 | 247.384 | 247.388 | 247.513 | 247.681 | 247.523 | 247.538 | 247.474 | 247.308 | 247.380 | 247.328 | 247.345 | 7 |
| 8 | 247.378 | 247.382 | 247.402 | 247.513 | 247.688 | 247.501 | 247.573 | 247.484 | 247.368 | 247.308 | 247.417 | 247.354 | 8 |
| 9 | 247.374 | 247.390 | 247.408 | 247.508 | 247.627 | 247.489 | 247.588 | 247.423 | 247.448 | 247.370 | 247.382 | 247.358 | 9 |
| 10 | 247.378 | 247.381 | 247.410 | 247.488 | 247.608 | 247.458 | 247.521 | 247.408 | 247.444 | 247.328 | 247.303 | 247.350 | 10 |
| 11 | 247.380 | 247.388 | 247.416 | 247.480 | 247.515 | 247.535 | 247.487 | 247.414 | 247.525 | 247.310 | 247.403 | 247.344 | 11 |
| 12 | 247.375 | 247.388 | 247.416 | 247.480 | 247.542 | 247.582 | 247.528 | 247.417 | 247.381 | 247.322 | 247.378 | 247.349 | 12 |
| 13 | 247.387 | 247.380 | 247.413 | 247.486 | 247.576 | 247.782 | 247.508 | 247.518 | 247.341 | 247.387 | 247.388 | 247.343 | 13 |
| 14 | 247.372 | 247.381 | 247.416 | 247.484 | 247.570 | 247.588 | 247.484 | 247.488A | 247.388 | 247.378 | 247.342 | 247.351 | 14 |
| 15 | 247.378 | 247.387 | 247.417 | 247.481 | 247.572 | 247.548 | 247.484 | 247.433 | 247.381 | 247.472 | 247.415 | 247.348 | 15 |
| 16 | 247.373 | 247.382 | 247.418 | 247.488 | 247.584 | 247.507 | 247.441 | 247.421 | 247.407 | 247.374 | 247.380 | 247.343 | 16 |
| 17 | 247.381 | 247.382 | 247.421 | 247.482 | 247.548 | 247.500 | 247.446 | 247.388 | 247.326 | 247.388 | 247.385 | 247.348 | 17 |
| 18 | 247.382 | 247.388 | 247.418 | 247.500 | 247.558 | 247.536 | 247.517 | 247.330 | 247.488 | 247.283 | 247.343 | 247.348 | 18 |
| 19 | 247.386 | 247.390 | 247.418 | 247.506 | 247.580 | 247.536 | 247.513 | 247.475 | 247.408 | 247.241 | 247.338 | 247.342 | 19 |
| 20 | 247.388 | 247.387 | 247.418 | 247.517 | 247.477 | 247.534 | 247.488 | 247.428 | 247.414 | 247.348 | 247.384 | 247.332 | 20 |
| 21 | 247.385 | 247.388 | 247.418 | 247.528 | 247.572 | 247.580 | 247.484 | 247.353 | 247.407 | 247.304 | 247.347 | 247.333 | 21 |
| 22 | 247.385 | 247.387 | 247.423 | 247.532 | 247.583 | 247.587 | 247.418 | 247.383 | 247.800 | 247.340 | 247.350 | 247.338 | 22 |
| 23 | 247.388 | 247.391 | 247.425 | 247.521 | 247.580 | 247.582 | 247.388 | 247.350 | 247.318 | 247.350 | 247.341 | 247.336 | 23 |
| 24 | 247.388 | 247.388 | 247.423 | 247.534 | 247.610 | 247.583 | 247.407 | 247.395 | 247.388 | 247.332 | 247.340 | 247.345 | 24 |
| 25 | 247.388 | 247.393 | 247.427 | 247.538 | 247.740 | 247.544 | 247.436 | 247.385 | 247.485 | 247.348 | 247.340 | 247.347 | 25 |
| 26 | 247.378 | 247.388 | 247.431 | 247.580 | 247.845 | 247.488 | 247.522 | 247.245 | 247.316 | 247.402 | 247.348 | 247.344 | 26 |
| 27 | 247.378 | 247.387 | 247.438 | 247.619 | 247.822 | 247.598 | 247.532 | 247.308 | 247.302 | 247.297 | 247.344 | 247.351 | 27 |
| 28 | 247.377 | 247.384 | 247.443 | 247.674 | 247.713 | 247.535 | 247.426 | 247.272 | 247.383 | 247.380 | 247.340 | 247.358 | 28 |
| 29 | 247.378 | | 247.453 | 247.718 | 247.598 | 247.557 | 247.438 | 247.441 | 247.348 | 247.410 | 247.337 | 247.351 | 29 |
| 30 | 247.382 | | 247.458 | 247.745 | 247.538 | 247.388 | 247.447 | 247.372 | 247.381 | 247.388A | 247.347 | 247.349 | 30 |
| 31 | 247.386 | | 247.446 | | 247.548 | | 247.438 | 247.423 | | 247.403 | | 247.348 | 31 |
| MEAN | 247.378 | 247.381 | 247.417 | 247.527 | 247.629 | 247.556 | 247.495 | 247.408 | 247.388 | 247.373 | 247.349 | 247.346 | MEAN |
| MAX | 247.388 | 247.387 | 247.453 | 247.745 | 247.845 | 247.582 | 247.538 | 247.800 | 247.800 | 247.668 | 247.432 | 247.358 | MAX |
| MIN | 247.367 | 247.381 | 247.380 | 247.443 | 247.477 | 247.445 | 247.388 | 247.245 | 247.302 | 247.241 | 247.174 | 247.333 | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MEAN, 247.438
MAXIMUM DAILY, 247.882 ON JUN 12
MINIMUM DAILY, 247.174 ON NOV 3
MAXIMUM INSTANTANEOUS,
248.350 AT 15:20 CST ON MAY 4

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1928 ADJ.)

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 15 15 N
LONG 99 34 50 W

A - MANUAL GAUGE

REGULATED SINCE 1934

DRAINAGE AREA,
79 900 km²

## LAKE MINNEWASTA NEAR MORDEN - STATION NO. 05OC027

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 325.630 | 325.611E | 325.406 | 325.178 | 327.734 | 327.524 | 327.492 | 327.048 | 326.630 | 326.345 | 326.081 | 325.628 | 1 |
| 2 | 325.622 | 325.602E | 325.399 | 325.178 | 327.731 | 327.513 | 327.481 | 327.028 | 326.617 | 326.331 | 326.041 | 325.618 | 2 |
| 3 | 325.614 | 325.594E | 325.388 | 325.178 | 327.728 | 327.500 | 327.469 | 327.008 | 326.614 | 326.322 | 326.034 | 325.615 | 3 |
| 4 | 325.610 | 325.586A | 325.381 | 325.178 | 327.718 | 327.484 | 327.465 | 32[illegible].986 | 326.607 | 326.313 | 326.034 | 325.614 | 4 |
| 5 | 325.600 | 325.583 | 325.374 | 325.188 | 327.699 | 327.477 | 327.444 | 326.972 | 326.598 | 326.308 | 326.031 | 325.803 | 5 |
| 6 | 325.784 | 325.581 | 325.383 | 325.188 | 327.688 | 327.468 | 327.434 | 326.958 | 326.585 | 326.283 | 326.028 | 325.787 | 6 |
| 7 | 325.784 | 325.574 | 325.380 | 325.185 | 327.701 | 327.478 | 327.419 | 326.944 | 326.573 | 326.264 | 326.021 | 325.778 | 7 |
| 8 | 325.783 | 325.578 | 325.388 | 325.181 | 327.708 | 327.478 | 327.410 | 326.930 | 326.558 | 326.278 | 326.010 | 325.778 | 8 |
| 9 | 325.781 | 325.569 | 325.349 | 325.189 | 327.702 | 327.494 | 327.400 | 326.918 | 326.543 | 326.274 | 326.003 | 325.765 | 9 |
| 10 | 325.761 | 325.568 | 325.342 | 325.187 | 327.695 | 327.500 | 327.385 | 326.901 | 326.531 | 326.268 | 325.998 | 325.763 | 10 |
| 11 | 325.774 | 325.582 | 325.330 | 325.188 | 327.688 | 327.488 | 327.376 | 326.889 | 326.543 | 326.256 | 325.987 | 325.745 | 11 |
| 12 | 325.765 | 325.568 | 325.332 | 325.217 | 327.679 | 327.505 | 327.368 | 326.874 | 326.540 | 326.243 | 325.981 | 325.735 | 12 |
| 13 | 325.759 | 325.568 | 325.315 | 325.410 | 327.688 | 327.529 | 327.368 | 326.856 | 326.540 | 326.228 | 325.976 | 325.723 | 13 |
| 14 | 325.760 | 325.534 | 325.301 | 326.125 | 327.683 | 327.548 | 327.325 | 326.845 | 326.533 | 326.218 | 325.968 | 325.715 | 14 |
| 15 | 325.740 | 325.523A | 325.293 | 326.868 | 327.658 | 327.572 | 327.314 | 326.833 | 326.528 | 326.208 | 325.960 | 325.710 | 15 |
| 16 | 325.723 | 325.512E | 325.286 | 327.068 | 327.645 | 327.582 | 327.303 | 326.820 | 326.518 | 326.198 | 325.938 | 325.707 | 16 |
| 17 | 325.723 | 325.504E | 325.275 | 327.248 | 327.637 | 327.578 | 327.291 | 326.806 | 326.511 | 326.183 | 325.932 | 325.701 | 17 |
| 18 | 325.720 | 325.498A | 325.268 | 327.333 | 327.637 | 327.574 | 327.280 | 326.796 | 326.488 | 326.173 | 325.925 | 325.692 | 18 |
| 19 | 325.713 | 325.494 | 325.258 | 327.385 | 327.627 | 327.567 | 327.260 | 326.788 | 326.482 | 326.165 | 325.929 | 325.684 | 19 |
| 20 | 325.701 | 325.488 | 325.248 | 327.434 | 327.620 | 327.558 | 327.249 | 326.774 | 326.478 | 326.157 | 325.918 | 325.676A | 20 |
| 21 | 325.688 | 325.481 | 325.240 | 327.482 | 327.610 | 327.540 | 327.228 | 326.767 | 326.467 | 326.150 | 325.910 | 325.673E | 21 |
| 22 | 325.680 | 325.472 | 325.230 | 327.538 | 327.601 | 327.531 | 327.208 | 326.764 | 326.448 | 326.144 | 325.901 | 325.667E | 22 |
| 23 | 325.678 | 325.462 | 325.225 | 327.606 | 327.584 | 327.522 | 327.190 | 326.767 | 326.438 | 326.136 | 325.890 | 325.662A | 23 |
| 24 | 325.668 | 325.458 | 325.220 | 327.688 | 327.567 | 327.515 | 327.173 | 326.762 | 326.431 | 326.127 | 325.886 | 325.664 | 24 |
| 25 | 325.663 | 325.448 | 325.214 | 327.708 | 327.574 | 327.521 | 327.163 | 326.726 | 326.415 | 326.121 | 325.881 | 325.653 | 25 |
| 26 | 325.658 | 325.438 | 325.207 | 327.718 | 327.589 | 327.514 | 327.130 | 326.710 | 326.407 | 326.111 | 325.870 | 325.647 | 26 |
| 27 | 325.648 | 325.428 | 325.201 | 327.725 | 327.569 | 327.503 | 327.110 | 326.693 | 326.388 | 326.107 | 325.858 | 325.648 | 27 |
| 28 | 325.638 | 325.418 | 325.195 | 327.729 | 327.558 | 327.494 | 327.090 | 326.680 | 326.367 | 326.093 | 325.848 | 325.642 | 28 |
| 29 | 325.638 | | 325.193 | 327.727 | 327.547 | 327.488 | 327.081 | 326.681 | 326.372 | 326.082 | 325.847 | 325.629 | 29 |
| 30 | 325.628A | | 325.190 | 327.730 | 327.538 | 327.494 | 327.073 | 326.650 | 326.365 | 326.073 | 325.838 | 325.627 | 30 |
| 31 | 325.620E | | 325.180 | | 327.538 | | 327.068 | 326.642 | | 326.061 | | 325.620 | 31 |
| MEAN | 325.730 | 325.524 | 325.267 | 326.451 | 327.642 | 327.518 | 327.281 | 326.832 | 326.506 | 326.202 | 325.948 | 325.718 | MEAN |
| MAX | 325.830 | 325.611 | 325.406 | 327.730 | 327.734 | 327.582 | 327.492 | 327.048 | 326.630 | 326.345 | 326.081 | 325.828 | MAX |
| MIN | 325.620 | 325.418 | 325.180 | 325.178 | 327.538 | 327.468 | 327.068 | 326.642 | 326.365 | 326.061 | 325.838 | 325.620 | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MEAN, 326.382
MAXIMUM DAILY, 327.734 ON MAY 1
MINIMUM DAILY, 325.178 ON APR 1
MAXIMUM INSTANTANEOUS,
327.761 AT 16:58 CST ON MAY 1

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 10 55 N
LONG 98 08 04 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED

DRAINAGE AREA,
131 km²

## LAKE OF THE PRAIRIES NEAR SHELLMOUTH - STATION NO. 05MD005

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 426.556 | 426.377 | 426.100E | 425.880 | 426.287 | 426.424 | 426.820 | 426.871 | 426.529 | 426.420 | 426.410 | 426.388 | 1 |
| 2 | 426.556 | 426.388 | 426.091E | 425.893 | 426.305 | 426.432 | 426.838 | 426.861 | 426.520 | 426.388 | 426.385 | 426.383 | 2 |
| 3 | 426.551 | 426.384 | 426.077E | 425.908 | 426.307 | 426.448 | 426.845 | 426.857 | 426.515 | 426.379 | 426.392 | 426.383 | 3 |
| 4 | 426.543 | 426.367 | 426.063E | 425.923 | 426.289 | 426.458 | 426.838 | 426.847 | 426.526 | 426.371 | 426.408 | 426.382 | 4 |
| 5 | 426.538 | 426.353 | 426.051E | 425.941 | 426.271 | 426.460 | 426.868 | 426.861 | 426.518 | 426.388 | 426.409 | 426.382 | 5 |
| 6 | 426.530 | 426.350 | 426.048E | 425.962 | 426.317 | 426.462 | 426.853 | 426.838 | 426.519 | 426.380 | 426.388 | 426.381 | 6 |
| 7 | 426.525 | 426.368 | 426.043E | 425.988 | 426.338 | 426.472 | 426.849 | 426.830 | 426.516 | 426.370 | 426.416 | 426.370 | 7 |
| 8 | 426.520 | 426.340 | 426.038A | 425.998 | 426.341 | 426.486 | 426.875 | 426.825 | 426.521 | 426.356 | 426.418 | 426.365 | 8 |
| 9 | 426.518 | 426.336 | 426.026 | 426.008 | 426.342 | 426.486 | 426.885 | 426.816 | 426.516 | 426.352 | 426.425 | 426.384 | 9 |
| 10 | 426.511 | 426.333 | 426.027 | 426.024 | 426.329 | 426.484 | 426.875 | 426.813 | 426.499 | 426.348 | 426.420 | 426.362 | 10 |
| 11 | 426.505 | 426.318 | 426.023 | 426.035 | 426.320 | 426.497 | 426.883 | 426.895 | 426.486 | 426.341 | 426.421 | 426.356 | 11 |
| 12 | 426.498 | 426.313 | 426.014 | 426.047 | 426.332 | 426.518 | 426.908 | 426.907 | 426.470A | 426.345 | 426.412 | 426.352 | 12 |
| 13 | 426.478 | 426.304 | 426.005 | 426.057 | 426.382 | 426.547 | 426.918 | 426.890 | 426.470 | 426.353 | 426.414 | 426.350 | 13 |
| 14 | 426.465 | 426.285 | 425.999 | 426.065 | 426.383 | 426.530 | 426.721 | 426.869 | 426.465 | 426.349 | 426.408 | 426.349 | 14 |
| 15 | 426.462 | 426.272 | 425.990 | 426.101 | 426.388A | 426.522 | 426.719 | 426.575 | 426.466 | 426.345 | 426.418 | 426.341 | 15 |
| 16 | 426.461 | 426.280 | 425.981 | 426.117 | 426.338A | 426.521 | 426.718 | 426.542 | 426.446 | 426.348 | 426.413 | 426.334 | 16 |
| 17 | 426.454 | 426.267 | 425.973 | 426.127 | 426.387A | 426.552 | 426.718 | 426.543 | 426.460 | 426.362 | 426.414 | 426.329 | 17 |
| 18 | 426.443 | 426.238 | 425.964 | 426.141 | 426.368A | 426.554 | 426.720 | 426.543 | 426.468 | 426.328 | 426.412 | 426.324 | 18 |
| 19 | 426.432 | 426.223 | 425.954 | 426.159 | 426.370A | 426.549 | 426.718 | 426.577 | 426.456 | 426.318 | 426.408 | 426.316 | 19 |
| 20 | 426.430 | 426.211 | 425.944 | 426.176 | 426.400A | 426.575 | 426.719 | 426.619 | 426.493 | 426.352 | 426.408 | 426.308 | 20 |
| 21 | 426.431 | 426.199 | 425.938 | 426.186 | 426.401A | 426.589 | 426.595 | 426.498 | 426.495 | 426.329 | 426.411 | 426.297 | 21 |
| 22 | 426.423 | 426.185 | 425.932 | 426.203 | 426.398A | 426.575 | 426.588 | 426.500 | 426.458 | 426.358 | 426.408 | 426.292 | 22 |
| 23 | 426.416 | 426.178 | 425.921 | 426.217 | 426.413A | 426.579 | 426.700 | 426.498 | 426.405 | 426.381 | 426.412 | 426.288 | 23 |
| 24 | 426.413 | 426.186 | 425.911 | 426.232 | 426.388A | 426.588 | 426.686 | 426.497 | 426.434 | 426.384 | 426.408 | 426.275 | 24 |
| 25 | 426.403 | 426.182 | 425.904 | 426.242 | 426.458A | 426.593 | 426.706 | 426.496 | 426.425 | 426.356 | 426.413 | 426.272 | 25 |
| 26 | 426.403 | 426.134A | 425.901 | 426.255 | 426.407A | 426.621 | 426.723 | 426.508 | 426.385 | 426.380 | 426.413 | 426.269 | 26 |
| 27 | 426.402 | 426.123E | 425.900 | 426.264 | 426.418A | 426.612 | 426.677 | 426.401 | 426.414 | 426.413 | 426.413 | 426.281 | 27 |
| 28 | 426.396 | 426.112E | 425.898 | 426.276 | 426.450A | 426.603 | 426.650 | 426.529 | 426.415 | 426.408 | 426.400 | 426.261 | 28 |
| 29 | 426.388 | | 425.890 | 426.281 | 426.414A | 426.622 | 426.687 | 426.551 | 426.385 | 426.405 | 426.400 | 426.246 | 29 |
| 30 | 426.388 | | 425.882 | 426.288 | 426.417A | 426.618 | 426.671 | 426.534 | 426.399 | 426.398 | 426.397 | 426.238 | 30 |
| 31 | 426.382 | | 425.877 | | 426.423A | | 426.682 | 426.534 | | 426.406 | | 426.230 | 31 |
| MEAN | 426.486 | 426.286 | 425.979 | 426.101 | 426.370 | 426.532 | 426.684 | 426.573 | 426.467 | 426.387 | 426.410 | 426.324 | MEAN |
| MAX | 426.556 | 426.377 | 426.100 | 426.288 | 426.458 | 426.622 | 426.733 | 426.667 | 426.529 | 426.420 | 426.426 | 426.383 | MAX |
| MIN | 426.388 | 426.112 | 425.877 | 425.880 | 426.287 | 426.424 | 426.820 | 426.477 | 426.385 | 426.316 | 426.385 | 426.230 | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MEAN, 426.379
MAXIMUM DAILY, 426.723 ON JUL 26
MINIMUM DAILY, 425.877 ON MAR 31
MAXIMUM INSTANTANEOUS,
426.787 AT 20:30 CST ON JUL 11

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 57 58 N
LONG 101 26 21 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED SINCE 1988

DRAINAGE AREA,
17 800 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## LAKE ST. MARTIN NEAR HILBRE - STATION NO. 05LM005

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 242.740 | 242.854A | 242.844A | 243.080E | 242.936 | 242.885 | 242.740 | 242.777 | 242.764 | 242.921 | 242.780 | 242.848 | 1 |
| 2 | 242.745 | 242.858A | 242.858E | 243.081E | 242.991 | 242.867 | 242.764 | 242.770 | 242.775 | 242.809 | 242.761 | 242.846 | 2 |
| 3 | 242.750 | 242.858E | 242.858E | 243.082E | 242.987 | 242.862 | 242.778 | 242.781 | 242.751 | 242.736 | 242.721 | 242.852 | 3 |
| 4 | 242.755 | 242.874E | 242.991E | 243.082A | 243.048 | 242.801 | 242.755 | 242.787 | 242.775 | 242.719 | 242.735 | 242.857 | 4 |
| 5 | 242.757 | 242.878E | 242.983E | 243.083 | 243.017 | 242.830 | 242.800 | 242.803 | 242.774 | 242.765 | 242.748 | 242.862 | 5 |
| 6 | 242.759 | 242.883E | 242.985E | 243.087 | 242.977 | 242.830 | 242.784 | 242.803 | 242.771 | 242.782 | 242.748 | 242.863 | 6 |
| 7 | 242.765 | 242.887E | 242.988E | 243.087 | 242.978 | 242.884 | 242.780 | 242.778 | 242.770 | 242.736 | 242.780 | 242.866 | 7 |
| 8 | 242.765 | 242.892E | 243.000E | 243.088 | 242.970 | 242.826 | 242.788 | 242.772 | 242.780 | 242.673 | 242.785 | 242.870 | 8 |
| 9 | 242.767 | 242.886A | 243.002E | 243.090 | 242.959 | 242.805 | 242.807 | 242.767 | 242.818 | 242.732 | 242.786 | 242.860 | 9 |
| 10 | 242.770 | 242.888E | 243.005A | 243.089 | 242.931 | 242.788 | 242.828 | 242.786 | 242.788 | 242.708 | 242.783 | 242.861 | 10 |
| 11 | 242.775 | 242.900E | 243.007E | 243.090 | 242.847 | 242.805 | 242.801 | 242.780 | 242.804 | 242.728 | 242.775 | 242.864 | 11 |
| 12 | 242.778 | 242.902E | 243.010E | 243.087 | 242.853 | 243.032 | 242.828 | 242.770 | 242.780 | 242.717 | 242.770 | 242.883 | 12 |
| 13 | 242.775 | 242.908E | 243.014E | 243.085 | 242.895 | 242.900 | 242.812 | 242.813 | 242.746 | 242.726 | 242.776 | 242.895 | 13 |
| 14 | 242.770 | 242.907E | 243.018E | 243.085 | 242.898 | 242.836 | 242.803 | 242.787 | 242.763 | 242.741 | 242.777 | 242.902 | 14 |
| 15 | 243.783 | 242.911E | 243.021E | 243.082 | 242.881 | 242.801 | 242.813 | 242.784 | 242.782 | 242.788 | 242.781 | 242.906 | 15 |
| 15 | 242.788 | 242.915E | 243.025E | 243.082 | 242.868 | 242.748 | 242.784 | 242.748 | 242.785 | 242.744 | 242.778 | 242.910 | 15 |
| 17 | 242.793 | 242.911E | 243.029E | 243.078 | 242.829 | 242.773 | 242.788 | 242.718 | 242.742 | 242.748 | 242.783 | 242.917 | 17 |
| 18 | 242.798 | 242.934E | 243.034E | 243.074 | 242.847 | 242.784 | 242.797 | 242.728 | 242.686 | 242.678 | 242.786 | 242.918 | 18 |
| 19 | 242.804 | 242.931E | 243.039E | 243.071 | 242.838 | 242.781 | 242.788 | 242.831 | 242.781 | 242.633 | 242.792 | 242.926 | 19 |
| 20 | 242.806 | 242.936E | 243.044E | 243.071 | 242.813 | 242.787 | 242.784 | 242.788 | 242.781 | 242.713 | 242.788 | 242.930 | 20 |
| 21 | 242.813 | 242.942E | 243.048E | 243.061 | 242.833 | 242.806 | 242.788 | 242.718 | 242.776 | 242.680 | 242.806 | 242.936 | 21 |
| 22 | 242.818 | 242.947E | 243.051E | 243.054 | 242.842 | 242.815 | 242.716 | 242.733 | 242.685 | 242.711 | 242.810 | 242.942 | 22 |
| 23 | 242.821 | 242.953E | 243.058A | 243.048 | 242.854 | 242.807 | 242.783 | 242.718 | 242.685 | 242.714 | 242.814 | 242.951 | 23 |
| 24 | 242.822 | 242.955A | 243.058E | 243.042 | 242.858 | 242.785 | 242.781 | 242.884 | 242.738 | 242.689 | 242.821 | 242.958 | 24 |
| 25 | 242.826 | 242.961E | 243.061E | 243.034 | 243.038 | 242.786 | 242.786 | 242.706 | 242.777 | 242.708 | 242.824 | 242.959 | 25 |
| 26 | 242.826 | 242.987E | 243.068E | 243.028 | 242.807 | 242.783 | 242.801 | 242.688 | 242.685 | 242.740 | 242.830 | 242.978 | 26 |
| 27 | 242.836 | 242.972E | 243.067E | 243.027 | 242.885 | 242.812 | 242.786 | 242.716 | 242.706 | 242.730 | 242.830 | 242.963 | 27 |
| 28 | 242.837 | 242.976E | 243.070E | 243.021 | 242.917 | 242.788 | 242.744 | 242.732 | 242.762 | 242.720 | 242.832 | 242.983 | 28 |
| 29 | 242.840 | | 243.073E | 243.025 | 242.868 | 242.788 | 242.780 | 242.836 | 242.726 | 242.741 | 242.838 | 242.988 | 29 |
| 30 | 242.847 | | 243.076A | 243.013 | 242.886 | 242.776 | 242.776 | 242.788 | 242.781 | 242.726 | 242.844 | 243.003 | 30 |
| 31 | 242.883 | | 243.078E | | 242.889 | | 242.773 | 242.798 | | 242.747 | | 243.013 | 31 |
| MEAN | 242.783 | 242.915 | 243.029 | 243.067 | 242.907 | 242.818 | 242.782 | 242.762 | 242.758 | 242.732 | 242.786 | 242.917 | MEAN |
| MAX | 242.883 | 242.976 | 243.078 | 243.090 | 243.048 | 243.032 | 242.829 | 242.893 | 242.858 | 242.821 | 242.844 | 243.013 | MAX |
| MIN | 242.740 | 242.854 | 242.984 | 243.013 | 242.813 | 242.748 | 242.716 | 243.894 | 242.686 | 242.632 | 243.721 | 242.848 | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MEAN, 242.884
MAXIMUM DAILY, 243.090 ON APR 9
MINIMUM DAILY, 242.632 ON OCT 19
MAXIMUM INSTANTANEOUS,
243.238 AT 18:24 CST ON MAY 4

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 30 33 N
LONG 98 31 38 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED

DRAINAGE AREA,
82 300 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1984 ADJ.)

## LAKE WAHTOPANAH NEAR RIVERS - STATION NO. 05MF020

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 487.863 | 487.870 | 487.918 | 487.877 | 488.344 | 488.295 | 488.381 | 488.224 | 488.043 | 487.788 | 487.517 | 487.488 | 1 |
| 2 | 487.864 | 487.870 | 487.918 | 487.910 | 488.342 | 488.281 | 488.371 | 488.224 | 488.009 | 487.788 | 487.509 | 487.482 | 2 |
| 3 | 487.862 | 487.870 | 487.912 | 487.952 | 488.338 | 488.286 | 488.384 | 488.222 | 487.987 | 487.786 | 487.501 | 487.481 | 3 |
| 4 | 487.862 | 487.868 | 487.910 | 487.886 | 488.341 | 488.286 | 488.387 | 488.213 | 487.959 | 487.745 | 487.498 | 487.480 | 4 |
| 5 | 487.863 | 487.867 | 487.907 | 488.018 | 488.326 | 488.285 | 488.380 | 488.208 | 487.936 | 487.741 | 487.493 | 487.487 | 5 |
| 6 | 487.865 | 487.863 | 487.906 | 488.052 | 488.315 | 488.276 | 488.363 | 488.196 | 487.888 | 487.731 | 487.488 | 487.481 | 6 |
| 7 | 487.870 | 487.880 | 487.900 | 488.085 | 488.312 | 488.282 | 488.336 | 488.191 | 487.855 | 487.722 | 487.486 | 487.448 | 7 |
| 8 | 487.871 | 487.855 | 487.897 | 488.111 | 488.309 | 488.278 | 488.356 | 488.185 | 487.857 | 487.711 | 487.490 | 487.448 | 8 |
| 9 | 487.872 | 487.853 | 487.897 | 488.138 | 488.305 | 488.280 | 488.359 | 488.176 | 487.893 | 487.704 | 487.491 | 487.444 | 9 |
| 10 | 487.871 | 487.852 | 487.897 | 488.172 | 488.295 | 488.290 | 488.348 | 488.188 | 487.909 | 487.698 | 487.489 | 487.438 | 10 |
| 11 | 487.871 | 487.851 | 487.895 | 488.204 | 488.283 | 488.277 | 488.336 | 488.180 | 487.910 | 487.682 | 487.484 | 487.436 | 11 |
| 12 | 487.870 | 487.851 | 487.894 | 488.236 | 488.278 | 488.288 | 488.326 | 488.168 | 487.910 | 487.676 | 487.482 | 487.431 | 12 |
| 13 | 487.871 | 487.850 | 487.893 | 488.281 | 488.277 | 488.287 | 488.312 | 488.155 | 487.910 | 487.670 | 487.482 | 487.426 | 13 |
| 14 | 487.872 | 487.850 | 487.892 | 488.278 | 488.278 | 488.278 | 488.303 | 488.153 | 487.910 | 487.662 | 487.481 | 487.421 | 14 |
| 15 | 487.874 | 487.848 | 487.888 | 488.288 | 488.274 | 488.278 | 488.294 | 488.149 | 487.904 | 487.655 | 487.481 | 487.413 | 15 |
| 16 | 487.873 | 487.847 | 487.885 | 488.310 | 488.288 | 488.272 | 488.287 | 488.142 | 487.907 | 487.641 | 487.480 | 487.407 | 16 |
| 17 | 487.874 | 487.845 | 487.882 | 488.314 | 488.278 | 488.282 | 488.283 | 488.138 | 487.898 | 487.630 | 487.478 | 487.401 | 17 |
| 18 | 487.874 | 487.843 | 487.879 | 488.317 | 488.280 | 488.308 | 488.281 | 488.150 | 487.894 | 487.618 | 487.478 | 487.393 | 18 |
| 19 | 487.874 | 487.841 | 487.878 | 488.318 | 488.286 | 488.342 | 488.278 | 488.150 | 487.895 | 487.604 | 487.478 | 487.388 | 19 |
| 20 | 487.874 | 487.840 | 487.872 | 488.328 | 488.283 | 488.378 | 488.278 | 488.143 | 487.894 | 487.589 | 487.478 | 487.378 | 20 |
| 21 | 487.874 | 487.836 | 487.870 | 488.341 | 488.278 | 488.408 | 488.278 | 488.140 | 487.878 | 487.585 | 487.478 | 487.385 | 21 |
| 22 | 487.873 | 487.830 | 487.865 | 488.351 | 488.278 | 488.432 | 488.268 | 488.138 | 487.885 | 487.587 | 487.477 | 487.386 | 22 |
| 23 | 487.873 | 487.826 | 487.863 | 488.356 | 488.273 | 488.440 | 488.264 | 488.138 | 487.845 | 487.579 | 487.477 | 487.384 | 23 |
| 24 | 487.873 | 487.828 | 487.860 | 488.365 | 488.286 | 488.441 | 488.260 | 488.135 | 487.841 | 487.571 | 487.477 | 487.336 | 24 |
| 25 | 487.871 | 487.823 | 487.859 | 488.387 | 488.294 | 488.428 | 488.264 | 488.142 | 487.834 | 487.564 | 487.477 | 487.328 | 25 |
| 26 | 487.871 | 487.822 | 487.858 | 488.388 | 488.281 | 488.404 | 488.268 | 488.141 | 487.826 | 487.563 | 487.478 | 487.321 | 26 |
| 27 | 487.871 | 487.820 | 487.859 | 488.362 | 488.257 | 488.388 | 488.241 | 488.138 | 487.814 | 487.553 | 487.476 | 487.316 | 27 |
| 28 | 487.870 | 487.816 | 487.859 | 488.358 | 488.261 | 488.367 | 488.235 | 488.138 | 487.806 | 487.544 | 487.473 | 487.311 | 28 |
| 29 | 487.870 | | 487.860 | 488.354 | 488.256 | 488.380 | 488.233 | 488.140 | 487.788 | 487.537 | 487.470 | 487.303 | 29 |
| 30 | 487.870 | | 487.861 | 488.345 | 488.255 | 488.387 | 488.231 | 488.113 | 487.790 | 487.530 | 487.489 | 487.294 | 30 |
| 31 | 487.870 | | 487.865 | | 488.255 | | 488.226 | 488.080 | | 487.523 | | 487.285 | 31 |
| MEAN | 487.870 | 487.848 | 487.884 | 488.224 | 488.285 | 488.327 | 488.298 | 488.158 | 487.888 | 487.643 | 487.484 | 487.383 | MEAN |
| MAX | 487.874 | 487.870 | 487.918 | 488.387 | 488.344 | 488.441 | 488.381 | 488.224 | 488.043 | 487.788 | 487.517 | 487.488 | MAX |
| MIN | 487.862 | 487.816 | 487.859 | 487.877 | 488.255 | 488.255 | 488.226 | 488.080 | 487.790 | 487.523 | 487.489 | 487.285 | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MEAN, 487.859
MAXIMUM DAILY, 488.441 ON JUN 24
MINIMUM DAILY, 487.285 ON DEC 31
MAXIMUM INSTANTANEOUS,
488.443 AT 05:57 CST ON JUN 24

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 01 37 N
LONG 100 11 58 W

REGULATED

DRAINAGE AREA,
3 900 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

REMARKS - PREVIOUS TO 1988 PUBLISHED UNDER THE NAME "RIVERS RESERVOIR NEAR RIVERS"

## LAKE WINNIPEG AT BERENS RIVER - STATION NO. 05RD005

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 216.827 | 216.837 | 216.823 | 216.871 | 217.084 | 217.330 | 217.333 | 217.418 | 217.383 | 217.225 | 217.138 | 217.138 | 1 |
| 2 | 216.820 | 216.838 | 216.821 | 216.861 | 217.097 | 217.190 | 217.370 | 217.418 | 217.364 | 217.243 | 217.108 | 217.068 | 2 |
| 3 | 216.824 | 216.838 | 216.823 | 216.861 | 217.094 | 217.241 | 217.386 | 217.425 | 217.308 | 217.258 | 217.008 | 217.031 | 3 |
| 4 | 216.827 | 216.839 | 216.830 | 216.861 | 217.098 | 217.188 | 217.366 | 217.443 | 217.402 | 217.232 | 217.193A | 217.068 | 4 |
| 5 | 216.834 | 216.850 | 216.846 | 216.892 | 217.076 | 217.218 | 217.372 | 217.424 | 217.378 | 217.398 | --- | 217.082 | 5 |
| 6 | 216.833 | 216.852 | 216.821 | 216.868 | 217.080 | 217.211 | 217.358 | 217.443 | 217.335 | 217.298 | --- | 217.080 | 6 |
| 7 | 216.838 | 216.870 | 216.838 | 216.892 | 217.118 | 217.197 | 217.391 | 217.461 | 217.471 | 217.183 | --- | 217.047 | 7 |
| 8 | 216.830 | 216.864 | 216.847 | 216.895 | 217.106 | 217.210 | 217.381 | 217.438 | 217.390 | 217.188 | --- | 217.048 | 8 |
| 9 | 216.829 | 216.867 | 216.841 | 216.893 | 217.112 | 217.217 | 217.388 | 217.433 | 217.418 | 217.268 | --- | 217.080 | 9 |
| 10 | 216.826 | 216.872 | 216.851 | 216.895 | 217.108 | 217.238 | 217.378 | 217.437 | 217.407 | 217.195 | --- | 217.045 | 10 |
| 11 | 216.838 | 216.878 | 216.858 | 216.888 | 217.104 | 217.220 | 217.382 | 217.418 | 217.370 | 217.207 | --- | 217.034 | 11 |
| 12 | 216.840 | 216.874 | 216.853 | 216.870 | 217.103 | 217.180 | 217.382 | 217.428 | 217.384 | 217.242 | --- | 217.033 | 12 |
| 13 | 216.831 | 216.876 | 216.853 | 216.894 | 217.109 | 217.248 | 217.389 | 217.377 | 217.402 | 217.186 | --- | 217.036 | 13 |
| 14 | 216.851 | 216.881 | 216.856 | 216.896 | 217.121 | 217.266 | 217.387 | 217.401 | 217.333 | 217.152 | 217.142A | 217.033 | 14 |
| 15 | 216.838 | 216.873 | 216.857 | 216.898 | 217.122 | 217.263 | 217.402 | 217.403 | 217.373 | 217.177 | 217.183 | 217.034 | 15 |
| 16 | 216.842 | 216.878 | 216.856 | 217.005 | 217.128 | 217.281 | 217.388 | 217.394 | 217.304 | 217.163 | 217.083 | 217.034 | 16 |
| 17 | 216.836 | 216.874 | 216.880 | 217.004 | 217.121 | 217.279 | 217.400 | 217.376 | 217.307 | 217.173 | 217.167 | 217.023 | 17 |
| 18 | 216.838 | 216.881 | 216.869 | 217.007 | 217.138 | 217.281 | 217.402 | 217.408 | 217.367 | 217.157 | 217.064 | 217.024 | 18 |
| 19 | 216.842 | 216.886 | 216.871 | 217.014 | 217.130 | 217.272 | 217.401 | 217.441 | 217.302 | 217.169 | 217.139 | 217.025 | 19 |
| 20 | 216.837 | 216.891 | 216.855 | 217.018 | 217.137 | 217.303 | 217.411 | 217.373 | 217.381 | 217.141 | 217.138 | 217.023 | 20 |
| 21 | 216.838 | 216.900 | 216.864 | 217.010 | 217.184 | 217.284 | 217.388 | 217.373 | 217.362 | 217.075 | 217.088 | 217.022 | 21 |
| 22 | 216.842 | 216.888 | 216.858 | 217.018 | 217.148 | 217.326 | 217.403 | 217.352 | 217.418 | 217.142 | 217.122 | 217.006 | 22 |
| 23 | 216.838 | 216.888 | 216.865 | 217.029 | 217.187 | 217.302 | 217.455 | 217.303 | 217.236 | 217.134 | 217.082 | 217.016 | 23 |
| 24 | 216.836 | 216.906 | 216.858 | 217.042 | 217.131 | 217.311 | 217.418 | 217.352 | 217.431 | 217.076 | 217.030 | 217.036 | 24 |
| 25 | 216.831 | 216.926 | 216.862 | 217.052 | 217.241 | 217.318 | 217.438 | 217.385 | 217.362 | 217.116 | 217.084 | 217.025 | 25 |
| 26 | 216.831 | 216.911 | 216.870 | 217.083 | 217.189 | 217.278 | 217.478 | 217.455 | 217.229 | 217.113 | 217.068 | 217.021 | 26 |
| 27 | 216.825 | 216.913 | 216.872 | 217.067 | 217.218 | 217.308 | 217.384 | 217.435 | 217.274 | 217.218 | 217.089 | 217.024 | 27 |
| 28 | 216.831 | 216.924 | 216.873 | 217.077 | 217.194 | 217.301 | 217.407 | 217.362 | 217.311 | 217.216 | 217.032 | 217.020 | 28 |
| 29 | 216.831 | | 216.875 | 217.076 | 217.182 | 217.321 | 217.399 | 217.427 | 217.188 | 217.198 | 217.100 | 216.988 | 29 |
| 30 | 216.843 | | 216.878 | 217.082 | 217.217 | 217.338 | 217.416 | 217.408 | 217.218 | 217.118 | 217.087 | 217.007 | 30 |
| 31 | 216.837 | | 216.884 | | 217.185 | | 217.411 | 217.382 | | 217.111 | | 217.021 | 31 |
| MEAN | 216.833 | 216.877 | 216.863 | 217.013 | 217.137 | 217.268 | 217.398 | 217.406 | 217.349 | 217.182 | --- | 217.036 | MEAN |
| MAX | 216.851 | 216.926 | 216.878 | 217.082 | 217.241 | 217.326 | 217.478 | 217.455 | 217.431 | 217.395 | --- | 217.129 | MAX |
| MIN | 216.820 | 216.838 | 216.821 | 216.871 | 217.076 | 217.188 | 217.333 | 217.303 | 217.188 | 217.075 | --- | 216.988 | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MAXIMUM DAILY, 217.478 ON JUL 28
MINIMUM DAILY, 216.820 ON JAN 2
MAXIMUM INSTANTANEOUS,
217.488 AT 00:29 CST ON AUG 27

TYPE OF GAUGE - RECORDING
LOCATION - LAT 52 21 20 N
LONG 97 00 15 W

A - MANUAL GAUGE

REGULATED SINCE 1976

DRAINAGE AREA,
976 000 km²

WATER LEVELS ARE REFERRED TO LAKE WINNIPEG DATUM (1988)
APPLY .043 m ADJUSTMENT TO CONVERT TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1976 ADJ.)

## LAKE WINNIPEG AT GEORGE ISLAND - STATION NO. 05RE003

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 216.812 | 216.821 | 216.910 | 216.867 | 217.088 | 217.182 | --- | --- | --- | 217.166 | 217.084 | 217.076 | 1 |
| 2 | 216.817 | 216.822 | 216.913 | 216.869 | 217.083 | 217.148 | --- | --- | --- | 217.161 | 217.102 | 217.061 | 2 |
| 3 | 216.818 | 216.826 | 216.915 | 216.885 | 217.078 | 217.164 | --- | --- | --- | 217.209 | 217.210 | 217.062 | 3 |
| 4 | 216.824 | 216.832 | 216.918 | 216.887 | 217.086 | 217.173 | --- | --- | --- | 217.224 | 217.144 | 217.058 | 4 |
| 5 | 216.825 | 216.838 | 216.938 | 216.891 | 217.090 | 217.195 | --- | --- | --- | 217.283 | 217.086 | 217.048 | 5 |
| 6 | 216.828 | 216.843 | 216.922 | 216.885 | 217.077 | 217.188 | --- | --- | --- | 217.143 | 217.087 | 217.043 | 6 |
| 7 | 216.811 | 216.851 | 216.936 | 216.885 | 217.107 | 217.182 | --- | --- | --- | 217.172 | 217.117 | 217.041 | 7 |
| 8 | 216.813 | 216.843 | 216.936 | 216.885 | 217.090 | 217.187 | --- | --- | --- | 217.280 | 217.040 | 217.038 | 8 |
| 9 | 216.822 | 216.854 | 216.942 | 216.883 | 217.104 | 217.200 | --- | --- | --- | 217.223 | 217.085 | 217.027 | 9 |
| 10 | 216.816 | 216.860 | 216.944 | 216.895 | 217.101 | 217.208 | --- | --- | --- | 217.194 | 217.154 | 217.038 | 10 |
| 11 | 216.821 | 216.864 | 216.930 | 216.884 | 217.118 | 217.195 | --- | --- | --- | 217.239 | 217.101 | 217.027 | 11 |
| 12 | 216.826 | 216.867 | 216.942 | 216.868 | 217.107 | 217.167 | --- | --- | --- | 217.188 | 217.077 | 217.035 | 12 |
| 13 | 216.833 | 216.858 | 216.950 | 216.898 | 217.095 | 217.178 | --- | --- | 217.388A | 217.183 | 217.083 | 217.030 | 13 |
| 14 | 216.830 | 216.865 | 216.948 | 216.898 | 217.102 | 217.238 | --- | --- | 217.329 | 217.184 | 217.087 | 217.017 | 14 |
| 15 | 216.831 | 216.857 | 216.951 | 217.006 | 217.108 | 217.245 | --- | --- | 217.381 | 217.143 | 217.077 | 217.023 | 15 |
| 16 | 216.827 | 216.868 | 216.951 | 216.898 | 217.115 | 217.251 | --- | --- | 217.305 | 217.135 | 217.045 | 217.029 | 16 |
| 17 | 216.813 | 216.864 | 216.955 | 217.004 | 217.119 | 217.261 | --- | --- | 217.353 | 217.146 | 217.065 | 217.016 | 17 |
| 18 | 216.823 | 216.877 | 216.954 | 217.007 | 217.126 | 217.259 | --- | --- | 217.306 | 217.183 | 217.072 | 217.018 | 18 |
| 19 | 216.823 | 216.874 | 216.982 | 217.011 | 217.125 | 217.255 | --- | --- | 217.291 | 217.291 | 217.107 | 217.018 | 19 |
| 20 | 216.820 | 216.881 | 216.955 | 217.011 | 217.134 | 217.256 | --- | --- | 217.331 | 217.147 | 217.078 | 217.014 | 20 |
| 21 | 216.827 | 216.881 | 216.963 | 217.013 | 217.133 | 217.269 | --- | --- | 217.348 | 217.166 | 217.084 | 217.015 | 21 |
| 22 | 216.825 | 216.882 | 216.955 | 217.020 | 217.138 | 217.276A | --- | --- | 217.288 | 217.134 | 217.088 | 217.014 | 22 |
| 23 | 216.832 | 216.880 | 216.962 | 217.033 | 217.138 | --- | --- | --- | 217.288 | 217.123 | 217.080 | 217.030 | 23 |
| 24 | 216.821 | 216.892 | 216.973 | 217.034 | 217.126 | --- | --- | --- | 217.384 | 217.114 | 217.087 | 217.030 | 24 |
| 25 | 216.817 | 216.898 | 216.974 | 217.048 | 217.083 | --- | --- | --- | 217.245 | 217.117 | 217.083 | 217.018 | 25 |
| 26 | 216.826 | 216.886 | 216.978 | 217.047 | 217.088 | --- | --- | --- | 217.277 | 217.095 | 217.066 | 217.027 | 26 |
| 27 | 216.826 | 216.907 | 216.971 | 217.051 | 217.178 | --- | --- | --- | 217.341 | 217.148 | 217.080 | 217.026 | 27 |
| 28 | 216.836 | 216.911 | 216.970 | 217.060 | 217.135 | --- | --- | --- | 217.288 | 217.183 | 217.052 | 217.013 | 28 |
| 29 | 216.838 | | 216.974 | 217.050 | 217.184 | --- | --- | --- | 217.217 | 217.128 | 217.062 | 217.013 | 29 |
| 30 | 216.824 | | 216.977 | 217.055 | 217.184 | --- | --- | --- | 217.230 | 217.113 | 217.058 | 217.028 | 30 |
| 31 | 216.813 | | 216.980 | | 217.193 | | --- | --- | | 217.117 | | 217.019 | 31 |
| MEAN | 216.822 | 216.885 | 216.950 | 217.010 | 217.114 | --- | --- | --- | --- | 217.188 | 217.085 | 217.029 | MEAN |
| MAX | 216.838 | 216.911 | 216.980 | 217.055 | 217.188 | --- | --- | --- | --- | 217.351 | 217.210 | 217.076 | MAX |
| MIN | 216.811 | 216.821 | 216.910 | 216.863 | 217.050 | --- | --- | --- | --- | 217.095 | 217.040 | 217.013 | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MINIMUM DAILY, 216.811 ON JAN 7

TYPE OF GAUGE - RECORDING
LOCATION - LAT 52 48 00 N
LONG 97 37 20 W

A - MANUAL GAUGE

REGULATED

DRAINAGE AREA,
978 000 km²

WATER LEVELS ARE REFERRED TO LAKE WINNIPEG DATUM (1955)
APPLY .043 m ADJUSTMENT TO CONVERT TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1976 ADJ.)

## LAKE WINNIPEG AT GIMLI - STATION NO. 05RE006

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 216.872 | 216.828 | 216.933 | 216.985 | 217.104 | 217.184 | 217.338 | 217.385 | 217.471 | 217.838 | 217.383 | 217.067 | 1 |
| 2 | 216.836 | 216.834 | 216.946 | 217.028 | 217.124 | 217.401 | 217.388 | 217.417 | 217.385 | 217.875 | 217.240 | 217.144 | 2 |
| 3 | 216.848 | 216.825 | 216.930 | 217.046 | 217.161 | 217.336 | 217.385 | 217.464 | 217.215 | 217.327 | 216.706 | 217.011 | 3 |
| 4 | 216.814 | 216.823 | 216.886 | 217.027 | 217.144 | 217.291 | 217.287 | 217.305 | 217.184 | 217.181 | 216.686 | 217.073 | 4 |
| 5 | 216.838 | 216.836 | 216.967 | 217.036 | 217.384 | 217.213 | 217.430 | 217.883 | 217.386 | 217.153 | 217.333 | 217.128 | 5 |
| 6 | 216.869 | 216.867 | 216.978 | 217.038 | 217.188 | 217.263 | 217.580 | 217.825 | 217.373 | 217.711 | 217.088 | 217.077 | 6 |
| 7 | 216.812 | 216.864 | 216.933 | 217.046 | 217.089 | 217.383 | 217.306 | 217.844 | 217.314 | 217.384 | 216.988 | 217.081 | 7 |
| 8 | 216.862 | 216.874 | 216.985 | 217.045 | 217.180 | 217.287 | 217.388 | 217.477 | 217.428 | 217.030 | 217.384 | 217.078 | 8 |
| 9 | 216.810 | 216.842 | 216.967 | 217.052 | 217.128 | 217.220 | 217.454 | 217.388 | 217.412 | 217.078 | 217.178 | 217.113 | 9 |
| 10 | 216.863 | 216.861 | 216.978 | 217.014 | 217.126 | 217.220 | 217.566 | 217.380 | 217.508 | 217.184 | 217.024 | 217.048 | 10 |
| 11 | 216.836 | 216.886 | 217.038 | 217.047 | 217.033 | 217.283 | 217.424 | 217.422 | 217.471 | 217.143 | 217.271 | 217.045 | 11 |
| 12 | 216.846 | 216.844 | 216.972 | 217.010 | 217.081 | 217.448 | 217.484 | 217.393 | 217.402 | 217.238 | 217.197 | 217.052 | 12 |
| 13 | 216.781 | 216.901 | 216.956 | 217.004 | 217.131 | 217.561 | 217.471 | 217.578 | 217.136 | 217.262 | 217.130 | 217.068 | 13 |
| 14 | 216.882 | 216.874 | 216.983 | 217.051 | 217.185 | 217.305 | 217.441 | 217.473 | 217.373 | 217.287 | 217.020 | 217.077 | 14 |
| 15 | 216.851 | 216.883 | 216.962 | 216.988 | 217.127 | 217.231 | 217.433 | 217.437 | 217.303 | 217.343 | 217.300 | 217.037 | 15 |
| 16 | 216.817 | 216.864 | 216.862 | 217.068 | 217.108 | 217.133 | 217.381 | 217.388 | 217.438 | 217.288 | 217.238 | 217.040 | 16 |
| 17 | 216.871 | 216.868 | 216.884 | 217.018 | 217.060 | 217.114 | 217.410 | 217.284 | 217.128 | 217.285 | 217.148 | 217.011 | 17 |
| 18 | 216.830 | 216.868 | 216.978 | 217.040 | 217.085 | 217.284 | 217.462 | 217.170 | 217.438 | 217.088 | 217.127 | 217.031 | 18 |
| 19 | 216.858 | 216.890 | 216.976 | 217.038 | 217.124 | 217.346 | 217.432 | 217.478 | 217.483 | 216.844 | 217.082 | 217.048 | 19 |
| 20 | 216.826 | 216.878 | 216.988 | 217.071 | 217.088 | 217.184 | 217.387 | 217.585 | 217.300 | 217.083 | 217.336 | 217.040A | 20 |
| 21 | 216.826 | 216.928 | 216.861 | 217.063 | 217.141 | 217.418 | 217.388 | 217.373 | 217.341 | 216.884 | 217.116 | 217.028A | 21 |
| 22 | 216.842 | 216.902 | 216.848 | 217.053 | 217.186 | 217.421 | 217.260 | 217.370 | 217.743 | 217.088 | 217.087 | 217.033 | 22 |
| 23 | 216.857 | 216.870 | 217.004 | 217.043 | 217.212 | 217.384 | 217.263 | 217.284 | 217.438 | 217.136 | 217.130 | 216.976 | 23 |
| 24 | 216.830 | 216.834 | 216.972A | 217.102 | 217.220 | 217.267 | 217.348 | 217.150 | 216.834 | 217.048 | 217.032 | 217.043 | 24 |
| 25 | 216.856 | 216.874 | 216.991E | 217.078 | 217.444 | 217.286 | 217.304 | 217.123 | 217.588 | 217.081 | 217.128 | 217.078 | 25 |
| 26 | 216.802 | 216.881 | 217.018E | 217.106 | 217.888 | 217.248 | 217.607 | 217.306 | 217.228 | 217.185 | 217.081 | 217.013 | 26 |
| 27 | 216.810 | 216.920 | 217.036A | 217.118 | 217.152 | 217.408 | 217.887 | 217.446 | 216.801 | 217.088 | 217.093 | 217.081 | 27 |
| 28 | 216.826 | 216.887 | 217.033 | 217.114 | 217.428 | 217.260 | 217.347 | 217.291 | 217.376 | 217.150 | 217.088 | 217.071 | 28 |
| 29 | 216.811 | | 217.033 | 217.188 | 217.384 | 217.311 | 217.378 | 217.848 | 217.411 | 217.274 | 217.038 | 217.018 | 29 |
| 30 | 216.863 | | 217.031 | 217.109 | 217.151 | 217.380 | 217.438 | 217.804 | 217.183 | 217.288 | 217.090 | 216.984 | 30 |
| 31 | 216.901 | | 216.991 | | 217.382 | | 217.398 | 217.488 | | 217.140 | | 217.080 | 31 |
| MEAN | 216.843 | 216.880 | 216.980 | 217.053 | 217.186 | 217.304 | 217.408 | 217.404 | 217.337 | 217.301 | 217.122 | 217.053 | MEAN |
| MAX | 216.912 | 216.974 | 217.036 | 217.188 | 217.888 | 217.848 | 217.887 | 217.883 | 217.743 | 217.711 | 217.384 | 217.144 | MAX |
| MIN | 216.781 | 216.823 | 216.830 | 216.985 | 217.033 | 217.114 | 217.238 | 217.123 | 216.801 | 216.844 | 216.706 | 216.976 | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MEAN, 217.148
MAXIMUM DAILY, 217.743 ON SEP 23
MINIMUM DAILY, 216.644 ON OCT 19
MAXIMUM INSTANTANEOUS,
217.932 AT 19:57 CST ON SEP 22

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 37 50 N
LONG 96 59 59 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED SINCE 1976

DRAINAGE AREA,
978 000 km²

WATER LEVELS ARE REFERRED TO LAKE WINNIPEG DATUM (1955)
APPLY .043 m ADJUSTMENT TO CONVERT TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1955 ADJ.)

## LAKE WINNIPEG AT MATHESON ISLAND LANDING - STATION NO. 05SD002

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 218.847 | 218.838 | 218.823E | 218.883 | 217.081 | 217.208 | 217.278 | 217.411 | 217.403 | 217.352 | 217.210 | --- | 1 |
| 2 | 218.838 | 218.830 | 218.826E | 218.884 | 217.077 | 217.216 | 217.346 | 217.402 | 217.387 | 217.383 | 217.187 | --- | 2 |
| 3 | 218.838 | 218.838 | 218.828E | 218.888 | 217.082 | 217.267 | 217.377 | 217.422 | 217.234 | 217.260 | 216.880 | --- | 3 |
| 4 | 218.827 | 218.835 | 218.838A | 218.881 | 217.070 | 217.141 | 217.328 | 217.417 | 217.373 | 217.221 | 217.088 | --- | 4 |
| 5 | 218.838 | 218.848 | 218.848 | 217.003 | 217.069 | 217.218 | 217.398 | 217.408 | 217.380 | 217.283 | 217.188 | --- | 5 |
| 6 | 218.840 | 218.858 | 218.858 | 218.887 | 217.073 | 217.217 | 217.417 | 217.483 | 217.329 | 217.582 | 217.089 | --- | 6 |
| 7 | 218.851 | 218.888 | 218.848 | 217.002 | 217.048 | 217.238 | 217.380 | 217.476 | 217.428 | 217.268 | 217.088 | --- | 7 |
| 8 | 218.858 | 218.867 | 218.857 | 217.003 | 217.084 | 217.300 | 217.405 | 217.448 | 217.418 | 217.108 | 217.171 | --- | 8 |
| 9 | 218.830 | 218.885 | 218.854 | 217.003 | 217.044 | 217.201 | 217.388 | 217.410 | 217.451 | 217.224 | 217.116 | --- | 9 |
| 10 | 218.837 | 218.878 | 218.861 | 218.884 | 217.073 | 217.309 | 217.443 | 217.423 | 217.428 | 217.187 | 217.083 | --- | 10 |
| 11 | 218.832 | 218.878 | 218.888 | 217.000 | 217.027 | 217.225 | 217.383 | 217.406 | 217.402 | 217.262 | 217.325 | --- | 11 |
| 12 | 218.843 | 218.874 | 218.871 | 218.884 | 217.043 | 217.383 | 217.404 | 217.424 | 217.347 | 217.237 | 217.179 | --- | 12 |
| 13 | 218.818 | 218.888 | 218.883 | 218.888 | 217.040 | 217.328 | 217.404 | 217.422 | 217.323 | 217.200 | 217.094 | --- | 13 |
| 14 | 218.858 | 218.878 | 218.885 | 217.000 | 217.108 | 217.258 | 217.404 | 217.408 | 217.335 | 217.180 | 217.102 | --- | 14 |
| 15 | 218.834 | 218.877 | 218.882 | 218.881 | 217.108 | 217.246 | 217.401 | 217.408 | 217.322 | 217.221 | 217.208 | --- | 15 |
| 16 | 218.838 | 218.878 | 218.870 | 217.004 | 217.084 | 217.188 | 217.372 | 217.380 | 217.344 | 217.224 | 217.139 | --- | 16 |
| 17 | 218.842 | 218.883 | 218.887 | 218.888 | 217.071 | 217.231 | 217.384 | 217.333 | 217.209 | 217.205 | 217.140 | --- | 17 |
| 18 | 218.833 | 218.880 | 218.888 | 217.004 | 217.088 | 217.288 | 217.417 | 217.341 | 217.447 | 217.155 | 217.101 | --- | 18 |
| 19 | 218.850 | 218.888 | 218.874 | 217.001 | 217.100 | 217.282 | 217.387 | 217.408 | 217.337 | 216.985 | 217.080 | --- | 19 |
| 20 | 218.824 | 218.893 | 218.881 | 217.014 | 217.083 | 217.261 | 217.403 | 217.412 | 217.342 | 217.138 | 217.187 | --- | 20 |
| 21 | 218.838 | 218.818 | 218.881 | 217.002 | 217.138 | 217.312 | 217.388 | 217.308 | 217.288 | 217.045 | 217.080 | --- | 21 |
| 22 | 218.843 | 218.888 | 218.884 | 217.011 | 217.130 | 217.370 | 217.328 | 217.343 | 217.607 | 217.118 | 217.113 | --- | 22 |
| 23 | 218.840 | 218.880 | 218.886 | 217.017 | 217.148 | 217.319 | 217.415 | 217.278 | 217.238 | 217.158 | 217.087 | --- | 23 |
| 24 | 218.832 | 218.921 | 218.882 | 217.033 | 217.118 | 217.280 | 217.387 | 217.262 | 217.247 | 217.087 | 217.048 | --- | 24 |
| 25 | 218.837 | 218.848 | 218.882 | 217.033 | 217.380 | 217.308 | 217.403 | 217.281 | 217.604 | 217.100 | 217.109 | --- | 25 |
| 26 | 218.823 | 218.828 | 218.887 | 217.047 | 217.284 | 217.278 | 217.543 | 217.353 | 217.208 | 217.148 | 217.082 | --- | 26 |
| 27 | 218.828 | 218.817 | 217.003 | 217.083 | 217.181 | 217.328 | 217.431 | 217.438 | 217.124 | 217.180 | 217.080 | --- | 27 |
| 28 | 218.834 | 218.818A | 217.002 | 217.058 | 217.233 | 217.271 | 217.373 | 217.368 | 217.388 | 217.251 | 217.051 | --- | 28 |
| 29 | 218.827 | | 218.888 | 217.072 | 217.188 | 217.303 | 217.383 | 217.408 | 217.298 | 217.234 | 217.088 | --- | 29 |
| 30 | 218.884 | | 218.858 | 217.058 | 217.182 | 217.333 | 217.410 | 217.428 | 217.180 | 217.202 | 217.070A | --- | 30 |
| 31 | 218.848 | | 218.977 | | 217.185 | | 217.387 | 217.405 | | 217.097 | | --- | 31 |
| MEAN | 218.838 | 218.881 | 218.889 | 217.011 | 217.118 | 217.280 | 217.391 | 217.398 | 217.342 | 217.201 | 217.114 | --- | MEAN |
| MAX | 218.858 | 218.948 | 217.003 | 217.072 | 217.380 | 217.370 | 217.543 | 217.488 | 217.607 | 217.582 | 217.325 | --- | MAX |
| MIN | 218.818 | 218.828 | 218.823 | 218.881 | 217.027 | 217.141 | 217.278 | 217.262 | 217.124 | 216.985 | 216.880 | --- | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MAXIMUM DAILY, 217.607 ON SEP 23
MINIMUM DAILY, 216.818 ON JAN 13
MAXIMUM INSTANTANEOUS,
217.818 AT 15:38 CST ON SEP 22

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 44 00 N
LONG 98 54 00 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED SINCE 1976

DRAINAGE AREA,
878 000 km²

WATER LEVELS ARE REFERRED TO LAKE WINNIPEG DATUM (1955).
APPLY .043 m ADJUSTMENT TO CONVERT TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1984 ADJ.)

## LAKE WINNIPEG AT MISSION POINT - STATION NO. 05SC001

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 218.828 | 218.822 | 218.818 | 217.015 | 217.101 | 217.180A | 217.382 | 217.408 | --- | 217.188E | 217.073A | 217.080 | 1 |
| 2 | 218.848 | 218.832 | 218.830 | 217.003 | 217.087 | 217.142 | 217.339 | 217.425 | --- | 217.081E | 217.121 | 217.081 | 2 |
| 3 | 218.847 | 218.833 | 218.843 | 218.888 | 217.082 | 217.180A | 217.302 | 217.416 | --- | 217.178E | 217.378A | 217.145 | 3 |
| 4 | 218.852 | 218.843 | 218.838 | 217.008 | 217.088 | 217.208 | 217.357 | 21. 428E | --- | 217.233E | 217.220A | 217.098 | 4 |
| 5 | 218.832 | 218.850 | 218.833 | 218.887 | 217.080 | 217.183 | 217.327 | 217.388E | 217.380A | 217.068E | 217.088A | 217.034 | 5 |
| 6 | 218.827 | 218.885 | 218.883 | 217.002 | 217.118 | 217.192 | 217.278 | 217.363 | 217.430A | 217.018E | 217.178 | 217.053 | 6 |
| 7 | 218.804 | 218.838 | 218.888 | 218.880 | 217.108 | 217.180A | 217.387 | 217.384 | 217.320 | 217.218E | 217.188 | 217.071 | 7 |
| 8 | 218.803 | 218.850 | 218.858 | 218.888 | 217.098 | 217.188 | 217.333 | 217.387 | 217.378A | 217.308E | 217.883A | 217.072 | 8 |
| 9 | 218.830 | 218.885 | 218.877 | 218.888 | 217.115 | 217.218 | 217.341 | 217.424 | 217.301A | 217.182E | 217.148A | 217.081 | 9 |
| 10 | 218.831 | 218.885 | 218.888 | 217.007 | 217.128 | 217.230A | 217.328A | 217.417 | 217.311 | 217.228A | 217.172E | 217.082E | 10 |
| 11 | 218.841 | 218.871 | 218.831 | 217.008 | 217.187 | 217.221A | 217.383A | 217.424 | 217.388A | 217.138A | 217.008E | 217.083E | 11 |
| 12 | 218.838 | 218.888 | 218.858 | 217.035 | 217.181 | 217.238E | 217.348A | 217.431A | 217.303A | 217.180 | 217.082 | 217.063E | 12 |
| 13 | 218.888 | 218.881 | 218.864 | 217.013 | 217.127 | 217.187A | 217.388 | --- | 217.380E | 217.230 | 217.887 | 217.048E | 13 |
| 14 | 218.820 | 218.886 | 218.853 | 217.008 | 217.108 | 217.243 | 217.348 | --- | 217.343E | 217.240A | 217.118 | 217.045 | 14 |
| 15 | 218.838 | 218.871 | 218.880 | 217.008 | 217.128 | 217.327 | 217.388 | --- | 217.334E | 217.188A | 216.941 | 217.081 | 15 |
| 16 | 218.833 | 218.878 | 218.888 | 217.026 | 217.184 | 217.303 | 217.388A | --- | 217.338E | 217.188 | 217.085 | 217.043 | 16 |
| 17 | 218.844 | 218.884 | 218.880 | 217.018 | 217.148 | 217.258 | 217.372A | --- | 217.328E | 217.181 | 217.028 | 217.038E | 17 |
| 18 | 218.826 | 218.888 | 218.878 | 217.032 | 217.142 | 217.304 | 217.384 | --- | 217.261E | 217.208 | 217.103 | 217.040E | 18 |
| 19 | 218.851 | 218.885 | 218.887 | 217.027 | 217.195 | 217.310 | 217.388 | --- | 217.284E | 217.328 | 217.092 | 217.038E | 19 |
| 20 | | | | | | | | | 217.277E | 217.210 | 217.013 | 217.028E | 20 |
| 21 | 218.880 | 218.878 | 218.884 | 217.058 | 217.181 | 217.241 | 217.433 | --- | 217.238E | 217.284 | 217.108 | 217.034 | 21 |
| 22 | 218.837 | 218.808 | 218.888 | 217.083 | 217.148 | 217.234 | 217.483 | --- | 217.034E | 217.183 | 217.033 | 217.087 | 22 |
| 23 | 218.830 | 218.832 | 218.882 | 217.083 | 217.137 | 217.288 | 217.410 | --- | 217.284E | 217.148 | 217.078 | 217.872 | 23 |
| 24 | 218.838 | 218.888 | 218.885 | 217.048 | 217.188 | 217.303 | 217.408 | --- | 217.238E | 217.258 | 217.180 | 217.044 | 24 |
| 25 | 218.841 | 218.888 | 218.882 | 217.058 | 217.058A | 217.308 | 217.404A | --- | 217.102E | 217.180 | 217.070 | 217.024 | 25 |
| 26 | 218.883 | 218.907 | 218.880 | 217.084 | 217.078 | 217.380A | 217.388A | --- | 217.388E | 217.170A | 217.088 | 217.088 | 26 |
| 27 | 218.882 | 218.928 | 218.873 | 217.080 | 217.208 | 217.332A | 217.334A | --- | 217.384E | 217.420E | 217.084 | 217.041 | 27 |
| 28 | 218.838 | 218.902 | 218.878 | 217.080 | 217.130 | 217.384 | 217.423 | --- | 217.121E | 217.028A | 217.118 | 217.024 | 28 |
| 29 | 218.848 | | 218.883 | 217.057 | 217.172 | 217.331 | 217.410 | --- | 217.283E | 217.088 | 217.087 | 217.053 | 29 |
| 30 | 218.818 | | 218.882 | 217.088 | 217.184 | 217.338 | 217.383 | --- | 217.377E | 217.134 | 217.081 | 217.052 | 30 |
| 31 | 218.788 | | 217.024 | | 217.170 | | 217.408 | --- | | 217.211A | | 217.018 | 31 |
| MEAN | 218.836 | 218.874 | 218.867 | 217.027 | 217.130 | 217.288 | 217.388 | --- | --- | 217.187 | 217.101 | 217.052 | MEAN |
| MAX | 218.888 | 218.932 | 217.024 | 217.088 | 217.208 | 217.384 | 217.483 | --- | --- | 217.420 | 217.378 | 217.145 | MAX |
| MIN | 218.788 | 218.822 | 218.818 | 218.888 | 217.058 | 217.142 | 217.278 | --- | --- | 217.018 | 216.941 | 217.018 | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MINIMUM DAILY, 218.788 ON JAN 31

TYPE OF GAUGE - RECORDING
LOCATION - LAT 53 11 00 N
LONG 98 13 30 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED SINCE 1976

DRAINAGE AREA,
878 000 km²

WATER LEVELS ARE REFERRED TO LAKE WINNIPEG DATUM (1955).
APPLY .084 m ADJUSTMENT TO CONVERT TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1989 ADJ.)

## LAKE WINNIPEG AT MONTREAL POINT - STATION NO. 05RF001

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | --- | 217.187 | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | --- | --- | --- | 217.181 | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | --- | 217.135 | --- | --- | --- | --- | --- | --- | 3 |
| 4 | 216.768A | --- | --- | --- | --- | 217.246 | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | --- | --- | --- | 217.198 | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | --- | --- | --- | 217.187 | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | --- | --- | --- | 217.148 | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | --- | --- | --- | 217.188A | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 217.110A | --- | --- | 217.428A | --- | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 217.128 | --- | --- | 217.631 | --- | 217.083A | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 217.116 | --- | --- | 217.372 | --- | --- | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 217.100 | --- | --- | 217.358 | --- | --- | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 217.103 | --- | --- | 217.410 | --- | --- | --- | --- | 14 |
| 15 | --- | --- | --- | --- | 217.108 | --- | --- | 217.417 | --- | --- | --- | --- | 15 |
| 16 | --- | --- | --- | --- | 217.122 | --- | --- | 217.410 | --- | --- | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 217.164 | --- | --- | 217.480A | --- | --- | --- | --- | 17 |
| 18 | --- | --- | --- | --- | 217.138 | --- | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 217.138 | --- | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 217.186 | --- | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | --- | --- | 217.138 | --- | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | --- | --- | 217.151 | --- | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | --- | --- | 217.130 | --- | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | --- | --- | 217.121 | --- | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | --- | --- | 216.806 | --- | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | --- | --- | 217.063 | --- | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | --- | --- | 217.205 | --- | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | --- | --- | 217.128 | --- | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | --- | --- | --- | 217.208 | --- | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | --- | --- | --- | 217.210 | --- | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | --- | | 217.182 | | --- | --- | | --- | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MIN |

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 53 37 30 N
LONG 97 50 40 W

A - MANUAL GAUGE

REGULATED SINCE 1976

DRAINAGE AREA,
978 000 km²

WATER LEVELS ARE REFERRED TO LAKE WINNIPEG DATUM (1966)
APPLY .083 m ADJUSTMENT TO CONVERT TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1988 ADJ.)

## LAKE WINNIPEG AT PINE DOCK - STATION NO. 05RD001

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | 216.857 | 217.048 | 217.181 | 217.285 | 217.422 | 217.416 | 217.377 | 217.316A | 217.078 | 1 |
| 2 | --- | --- | --- | 216.878 | 217.084 | 217.233 | 217.341 | 217.426 | 217.352 | 217.423 | 217.126A | 217.088 | 2 |
| 3 | --- | --- | --- | 216.945 | 217.081 | 217.264 | 217.377 | 217.447 | 217.236 | 217.361 | 216.852 | 217.006 | 3 |
| 4 | --- | --- | --- | 216.873 | 217.092 | 217.183 | 217.316 | 217.418 | 217.348 | 217.186 | 217.032A | 217.044 | 4 |
| 5 | --- | --- | --- | 216.888 | 217.134 | 217.208 | 217.377 | 217.531 | 217.287 | 217.263 | 217.103A | 217.048 | 5 |
| 6 | --- | --- | --- | 216.881 | 217.088 | 217.216 | 217.432 | 217.521 | 217.335 | 217.540 | 217.088A | 217.048 | 6 |
| 7 | --- | --- | --- | 216.880 | 217.070 | 217.248 | 217.335 | 217.508 | 217.427 | 217.228 | 217.046A | 217.033 | 7 |
| 8 | --- | --- | --- | 216.868 | 217.088A | 217.303 | 217.386 | 217.478 | 217.430 | 217.078 | 217.146A | 217.038 | 8 |
| 9 | --- | --- | --- | 216.891 | 217.077A | 217.185 | 217.378 | 217.424 | 217.443 | 217.188 | 217.088A | 217.068 | 9 |
| 10 | 216.825A | --- | --- | 216.874 | 217.060A | 217.301 | 217.480 | 217.418 | 217.438 | 217.161 | 217.043A | 217.027 | 10 |
| 11 | 216.822 | --- | --- | 216.885 | 217.018A | 217.223 | 217.348 | 217.610 | 217.388 | 217.221 | 217.211A | 217.023 | 11 |
| 12 | 216.847 | --- | --- | 216.856 | 217.032A | 217.306 | 217.401 | 217.413 | 217.386 | 217.246 | 217.120A | 217.020 | 12 |
| 13 | 216.828 | --- | --- | 216.873 | 217.047A | 217.343 | 217.403 | 217.438 | 217.388 | 217.170 | 217.046A | 217.031 | 13 |
| 14 | 216.863 | --- | --- | 216.883 | 217.061A | 217.286 | 217.387 | 217.418 | 217.338 | 217.173 | 217.068A | 217.023 | 14 |
| 15 | 216.844 | --- | --- | 216.884 | 217.063A | 217.238 | 217.382 | 217.411 | 217.284 | 217.234 | 217.168A | 217.017 | 15 |
| 16 | 216.847 | --- | --- | 216.888 | 217.076A | 217.178 | 217.358 | 217.380 | 217.344 | 217.188 | 217.168A | 217.023 | 16 |
| 17 | 216.848 | --- | --- | 216.877 | 217.053A | 217.210 | 217.363 | 217.316 | 217.187 | 217.187 | 217.117A | 217.022 | 17 |
| 18 | 216.844 | --- | --- | 216.892 | 217.073 | 217.287 | 217.413 | 217.328 | 217.428 | 217.086 | 217.067A | 217.008 | 18 |
| 19 | 216.857 | --- | --- | 216.888 | 217.083 | 217.242 | 217.385 | 217.483 | 217.348 | 216.847 | 217.088A | 217.014 | 19 |
| 20 | 216.813 | --- | 216.843A | 217.006 | 217.087 | 217.228 | 217.368 | 217.428 | 217.320 | 217.088A | 217.178A | 217.017 | 20 |
| 21 | 216.864A | --- | 216.855 | 216.886 | 217.133 | 217.317 | 217.367 | 217.307 | 217.300 | 217.014A | 217.077A | 217.010 | 21 |
| 22 | --- | --- | 216.864 | 216.892 | 217.131 | 217.374 | 217.314 | 217.341 | 217.882 | 217.102A | 217.068A | 216.886 | 22 |
| 23 | --- | --- | 216.883 | 217.001 | 217.142 | 217.320 | 217.387 | 217.278 | 217.278 | 217.123A | 217.118A | 216.878 | 23 |
| 24 | --- | --- | 216.851 | 217.020 | 217.115 | 217.288 | 217.367 | 217.238 | 217.228 | 217.032A | 217.013A | 217.020 | 24 |
| 25 | --- | --- | 216.883 | 217.028 | 217.388 | 217.288 | 217.369 | 217.272 | 217.483 | 217.074A | 217.088A | 217.028 | 25 |
| 26 | --- | --- | 216.872 | 217.042 | 217.338 | 217.272 | 217.581 | 217.342 | 217.182 | 217.134A | 217.058A | 216.882 | 26 |
| 27 | --- | --- | 216.881 | 217.048 | 217.187 | 217.340 | 217.487 | 217.440 | 217.087 | 217.188 | 217.087A | 217.014 | 27 |
| 28 | --- | --- | 216.867 | 217.053 | 217.248 | 217.286 | 217.384 | 217.384 | 217.378 | 217.228A | 217.038A | 217.017 | 28 |
| 29 | --- | | 216.881 | 217.071 | 217.178 | 217.288 | 217.384 | 217.508 | 217.281 | 217.233A | 217.063A | 216.878 | 29 |
| 30 | --- | | 216.883 | 217.082 | 217.171 | 217.338 | 217.437 | 217.435 | 217.188 | 217.182A | 217.078A | 216.887 | 30 |
| 31 | --- | | 216.883 | | 217.201 | | 217.430 | 217.405 | | 217.088A | | 217.011 | 31 |
| MEAN | --- | --- | --- | 216.888 | 217.118 | 217.268 | 217.389 | 217.408 | 217.327 | 217.183 | 217.088 | 217.023 | MEAN |
| MAX | --- | --- | --- | 217.071 | 217.388 | 217.376 | 217.581 | 217.531 | 217.882 | 217.540 | 217.311 | 217.088 | MAX |
| MIN | --- | --- | --- | 216.867 | 217.018 | 217.183 | 217.285 | 217.338 | 217.087 | 216.847 | 216.852 | 216.867 | MIN |

SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MAXIMUM DAILY, 217.882 ON SEP 22

MAXIMUM INSTANTANEOUS,
217.788 AT 13:34 CST ON SEP 22

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 38 30 N
LONG 96 47 45 W

A - MANUAL GAUGE

REGULATED SINCE 1976

DRAINAGE AREA,
978 000 km²

WATER LEVELS ARE REFERRED TO LAKE WINNIPEG DATUM (1966)
APPLY .024 m ADJUSTMENT TO CONVERT TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1964 ADJ.)

## LAKE WINNIPEG AT VICTORIA BEACH - STATION NO. 05SA003

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 218.820 | 218.874 | 218.886 | 217.003 | 217.120 | 217.187 | 217.281 | 217.400 | 217.514 | 217.628 | 217.388 | 217.078 | 1 |
| 2 | 218.874 | 218.868 | 218.870 | 217.038 | 217.138 | 217.408 | 217.320 | 217.448 | 217.383 | 217.760 | 217.386 | 217.178 | 2 |
| 3 | 218.882 | 218.868 | 218.864 | 217.058 | 217.178 | 217.361 | 217.419 | 217.472 | 217.238 | 217.383 | 218.786 | 217.038 | 3 |
| 4 | 218.882 | 218.880 | 218.887 | 217.084 | 217.181 | 217.323 | 217.328 | 217.363 | 217.234 | 217.208 | 218.686 | 217.100 | 4 |
| 5 | 218.880 | 218.872 | 218.883 | 217.068 | 217.388 | 217.228 | 217.441 | 217.858 | 217.406 | 217.228 | 217.382 | 217.188 | 5 |
| 6 | 218.886 | 218.884 | 217.011 | 217.068 | 217.214 | 217.274 | 217.805 | 217.848 | 217.400 | 217.788 | 217.123 | 217.107 | 6 |
| 7 | 218.850 | 218.882 | 218.872 | 217.060 | 217.102 | 217.388 | 217.348 | 217.588 | 217.380 | 217.407 | 217.014 | 217.048 | 7 |
| 8 | 218.838 | 218.827 | 218.868 | 217.081 | 217.214 | 217.307 | 217.421 | 217.513 | 217.517 | 217.085 | 217.381 | 217.105 | 8 |
| 9 | 218.885 | 218.881 | 218.884 | 217.073 | 217.147 | 217.240 | 217.488 | 217.428 | 217.478 | 217.122 | 217.212 | 217.184 | 9 |
| 10 | 218.880 | 218.884 | 218.888 | 217.038 | 217.147 | 217.240 | 217.578 | 217.402 | 217.858 | 217.208 | 217.118 | 217.080 | 10 |
| 11 | 218.888 | 218.884 | 217.050 | 217.068 | 217.053 | 217.283 | 217.438 | 217.450 | 217.480 | 217.210 | 217.381 | 217.088 | 11 |
| 12 | 218.880 | 218.888 | 217.022 | 217.038 | 217.074 | 217.543 | 217.478 | 217.404 | 217.481 | 217.288 | 217.238 | 217.081 | 12 |
| 13 | 218.832 | 218.923 | 218.884 | 217.017 | 217.147 | 217.573 | 217.488 | 217.577 | 217.186 | 217.388 | 217.184 | 217.111 | 13 |
| 14 | 218.886 | 218.814 | 217.007 | 217.078 | 217.180 | 217.334 | 217.488 | 217.482 | 217.408 | 217.288 | 217.082 | 217.120 | 14 |
| 15 | 218.804 | 218.923 | 217.004 | 217.042 | 217.141 | 217.281 | 217.483 | 217.483 | 217.285 | 217.348 | 217.342 | 217.080 | 15 |
| 16 | 218.853 | 218.802 | 217.012 | 217.075 | 217.123 | 217.170 | 217.401 | 217.418 | 217.488 | 217.331 | 217.288 | 217.078 | 16 |
| 17 | 218.815 | 218.824 | 218.898 | 217.067 | 217.078 | 217.184 | 217.428 | 217.317 | 217.187 | 217.293 | 217.188 | 217.098 | 17 |
| 18 | 218.877 | 218.881 | 217.011 | 217.064 | 217.077 | 217.331 | 217.470 | 217.201 | 217.438 | 217.127 | 217.188 | 217.087 | 18 |
| 19 | 218.837 | 218.821 | 217.001 | 217.083 | 217.180 | 217.278 | 217.448 | 217.502 | 217.521 | 218.716 | 217.077 | 217.085 | 19 |
| 20 | 218.888 | 218.824 | 217.028 | 217.087 | 217.118 | 217.171 | 217.421 | 217.808 | 217.322 | 217.093 | 217.281 | 217.084 | 20 |
| 21 | 218.885 | 218.848 | 217.017 | 217.078 | 217.183 | 217.424 | 217.397 | 217.287 | 217.380 | 217.028 | 217.148 | 217.088 | 21 |
| 22 | 218.883 | 218.854 | 217.017 | 217.080 | 217.180 | 217.440 | 217.308 | 217.378 | 217.788 | 217.082 | 217.103 | 217.051 | 22 |
| 23 | 218.890 | 218.888 | 217.038 | 217.074 | 217.224 | 217.374 | 217.295 | 217.304 | 217.520 | 217.201 | 217.188 | 217.082 | 23 |
| 24 | 218.888 | 218.842 | 217.012 | 217.128 | 217.222 | 217.311 | 217.387 | 217.181 | 217.001 | 217.073 | 217.087 | 217.073 | 24 |
| 25 | 218.888 | 218.888 | 217.017 | 217.106 | 217.818 | 217.311 | 217.343 | 217.187 | 217.843 | 217.088 | 217.188 | 217.110 | 25 |
| 26 | 218.848 | 218.888 | 217.025 | 217.127 | 217.706 | 217.273 | 217.842 | 217.288 | 217.288 | 217.220 | 217.113 | 217.040 | 26 |
| 27 | 218.850 | 218.848 | 217.081 | 217.141 | 217.180 | 217.422 | 217.705 | 217.488 | 218.848 | 217.121 | 217.128 | 217.081 | 27 |
| 28 | 218.884 | 218.881 | 217.070 | 217.133 | 217.425 | 217.264 | 217.378 | 217.317 | 217.412 | 217.212 | 217.088 | 217.088 | 28 |
| 29 | 218.852 | | 217.080 | 217.188 | 217.318 | 217.331 | 217.387 | 217.880 | 217.458 | 217.322 | 217.087 | 217.038 | 29 |
| 30 | 218.883 | | 217.088 | 217.128 | 217.178 | 217.387 | 217.488 | 217.550 | 217.178 | 217.291 | 217.118 | 217.013 | 30 |
| 31 | 218.842 | | 217.032 | | 217.282 | | 217.423 | 217.473 | | 217.143 | | 217.087 | 31 |
| MEAN | 218.883 | 218.814 | 217.012 | 217.078 | 217.204 | 217.318 | 217.432 | 217.430 | 217.383 | 217.243 | 217.180 | 217.088 | MEAN |
| MAX | 218.850 | 218.888 | 217.070 | 217.188 | 217.706 | 217.573 | 217.705 | 217.858 | 217.788 | 217.788 | 217.381 | 217.178 | MAX |
| MIN | 218.832 | 218.880 | 218.884 | 217.003 | 217.053 | 217.184 | 217.281 | 217.187 | 218.848 | 218.718 | 218.788 | 217.002 | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MEAN 217.180
MAXIMUM DAILY, 217.788 ON SEP 22
MINIMUM DAILY, 218.718 ON OCT 19
MAXIMUM INSTANTANEOUS,
218.868 AT 18:30 CST ON SEP 22

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 42 30 N
LONG 96 34 10 W

REGULATED SINCE 1976

DRAINAGE AREA,
978 000 km²

WATER LEVELS ARE REFERRED TO LAKE WINNIPEG DATUM (1966)
APPLY .043 m ADJUSTMENT TO CONVERT TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1982 ADJ.)

## LAKE WINNIPEGOSIS AT DAWSON BAY - STATION NO. 05LD002

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 252.908 | 252.898 | 252.906 | 252.927 | 252.931 | 252.912 | 252.930 | 252.738 | --- | 252.547 | 252.570 | 252.687 | 1 |
| 2 | 252.922 | 252.898 | 252.911 | 252.921 | 252.918 | 252.880 | 252.835 | 252.781 | --- | 252.488 | 252.687 | 252.670 | 2 |
| 3 | 252.920 | 252.903 | 252.917 | 252.923 | 252.931 | 252.847 | 252.781 | 252.758 | --- | 252.605 | 252.637 | 252.684 | 3 |
| 4 | 252.917 | 252.906 | 252.912 | 252.933 | 252.918 | 252.909 | 252.881 | 252.738 | --- | 252.682 | 252.654 | 252.670 | 4 |
| 5 | 252.913 | 252.901 | 252.904 | 252.923 | 252.906 | 252.878 | 252.831 | 252.808 | --- | 252.521 | 252.630 | 252.682 | 5 |
| 6 | 252.901 | 252.908 | 252.920 | 252.926 | 252.958 | 252.954 | 252.811 | 252.676 | --- | 252.368 | 252.711 | 252.856 | 6 |
| 7 | 252.892 | 252.890 | 252.918 | 252.918 | 252.905 | 252.884 | 252.881 | 252.702 | --- | 252.537 | 252.647 | 252.688 | 7 |
| 8 | 252.901 | 252.903 | 252.914 | 252.918 | 252.921 | 252.901 | 252.835 | 252.715 | --- | 252.591 | 252.800 | 252.864 | 8 |
| 9 | 252.905 | 252.904 | 252.927 | 252.923 | 252.928 | 252.913 | 252.818 | 252.751 | --- | 252.543 | 252.888 | 252.858 | 9 |
| 10 | 252.908 | 252.900 | 252.913 | 252.926 | 252.948 | 252.912 | 252.834 | 252.732 | --- | 252.865 | 252.888 | 252.856 | 10 |
| 11 | 252.910 | 252.903 | 252.906 | 252.930 | 252.968 | 252.926 | 252.886 | 252.728 | --- | 252.510 | 252.647 | 252.886 | 11 |
| 12 | 252.910 | 252.910 | 252.920 | 252.944 | 252.950 | 252.780 | 252.815 | 252.698 | --- | 252.592 | 252.817 | 252.850 | 12 |
| 13 | 252.924 | 252.895 | 252.918 | 252.922 | 252.945 | 252.818 | 252.801 | 252.643 | --- | 252.688 | 252.887 | 252.860 | 13 |
| 14 | 252.896 | 252.894 | 252.915 | 252.927 | 252.920 | 252.897 | 252.806 | 252.678 | --- | 252.587 | 252.854 | 252.888 | 14 |
| 15 | 252.910 | 252.897 | 252.916 | 252.936 | 252.913 | 252.920 | 252.807 | 252.692 | --- | 252.575 | 252.851 | 252.864 | 15 |
| 16 | 252.901 | 252.899 | 252.918 | 252.921 | 252.928 | 252.980 | 252.831 | 252.712 | --- | 252.865 | 252.888 | 252.850 | 16 |
| 17 | 252.908 | 252.901 | 252.919 | 252.938 | 252.959 | 252.887 | 252.818 | 252.730 | --- | 252.575 | 252.648 | 252.858 | 17 |
| 18 | 252.913 | 252.904 | 252.924 | 252.930 | 252.941 | 252.880 | 252.804 | 252.704 | 252.597A | 252.706 | 252.686 | 252.850 | 18 |
| 19 | 252.903 | 252.900 | 252.914 | 252.933 | 252.956 | 252.915 | 252.804 | 252.618 | 252.704 | 252.786 | 252.683 | 252.852 | 19 |
| 20 | 252.921 | 252.903 | 252.918 | 252.931 | 252.969 | 252.845 | 252.817 | 252.853 | 252.686 | 252.653 | 252.858 | 252.845 | 20 |
| 21 | 252.914 | 252.890 | 252.922 | 252.950 | 252.916 | 252.826 | 252.861 | 252.748 | 252.672 | 252.721 | 252.858 | 252.851 | 21 |
| 22 | 252.908 | 252.904 | 252.918 | 252.942 | 252.865 | 252.829 | 252.885 | 252.742 | 252.447 | 252.538 | 252.864 | 252.872 | 22 |
| 23 | 252.904 | 252.916 | 252.926 | 252.942 | 252.916 | 252.861 | 252.756 | 252.767 | 252.731 | 252.521 | 252.883 | 252.872 | 23 |
| 24 | 252.911 | 252.895 | 252.925 | 252.937 | 252.883 | 252.828 | 252.814 | 252.713A | 252.620 | 252.691 | 252.861 | 252.870 | 24 |
| 25 | 252.911 | 252.895 | 252.923 | 252.935 | 252.824 | 252.881 | 252.716 | --- | 252.498 | 252.842 | 252.882 | 252.857 | 25 |
| 26 | 252.920 | 252.910 | 252.908 | 252.938 | 252.866 | 252.892 | 252.832 | --- | 252.745 | 252.815 | 252.864 | 252.875 | 26 |
| 27 | 252.918 | 252.906 | 252.911 | 252.928 | 252.930 | 252.826 | 252.726 | --- | 252.723 | 252.539 | 252.883 | 252.886 | 27 |
| 28 | 252.913 | 252.898 | 252.910 | 252.927 | 252.885 | 252.884 | 252.795 | --- | 252.827 | 252.451 | 252.887 | 252.887 | 28 |
| 29 | 252.914 | | 252.912 | 252.917 | 252.935 | 252.885 | 252.765 | --- | 252.678 | 252.562 | 252.872 | 252.883 | 29 |
| 30 | 252.896 | | 252.924 | 252.932 | 252.887 | 252.803 | 252.723 | --- | 252.731 | 252.535 | 252.871 | 252.870 | 30 |
| 31 | 252.889 | | 252.938 | | 252.898 | | 252.756 | --- | | 252.688 | | 252.868 | 31 |
| MEAN | 252.909 | 252.901 | 252.917 | 252.930 | 252.924 | 252.887 | 252.808 | --- | --- | 252.610 | 252.865 | 252.882 | MEAN |
| MAX | 252.924 | 252.916 | 252.938 | 252.950 | 252.963 | 252.994 | 252.930 | --- | --- | 252.786 | 252.837 | 252.884 | MAX |
| MIN | 252.889 | 252.890 | 252.904 | 252.916 | 252.824 | 252.780 | 252.832 | --- | --- | 252.389 | 252.447 | 252.845 | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MAXIMUM DAILY, 252.994 ON JUN 28
MINIMUM DAILY, 252.389 ON OCT 6
MAXIMUM INSTANTANEOUS,
253.018 AT 13:50 CST ON JUN 8

TYPE OF GAUGE - RECORDING
LOCATION - LAT 53 56 30 N
LONG 100 58 30 W

A - MANUAL GAUGE

NATURAL FLOW

DRAINAGE AREA,
53 500 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1982 ADJ.)

## LAKE WINNIPEGOSIS AT WINNIPEGOSIS - STATION NO. 05LH001

DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 253.102 | 253.105 | 253.114 | 253.128 | 253.134 | 253.108 | 252.948 | 252.842 | 252.818 | 253.311 | 253.038 | 252.868 | 1 |
| 2 | 253.095 | 253.105 | 253.114 | 253.138 | 253.184 | 253.137 | 253.011 | 252.818 | 252.802 | 253.063 | 252.818 | 252.868 | 2 |
| 3 | 253.094 | 253.100 | 253.112 | 253.141 | 253.134 | 253.188 | 253.068 | 252.838 | 252.828 | 252.827 | 252.868 | 252.863 | 3 |
| 4 | 253.098 | 253.100 | 253.117 | 253.141 | 253.168 | 253.024 | 252.994 | 253.022 | 252.845 | 252.778 | 252.892 | 252.858 | 4 |
| 5 | 253.095 | 253.108 | 253.123 | 253.143 | 253.205 | 253.113 | 253.108 | 253.282 | 252.900 | 252.887 | 252.933 | 252.870 | 5 |
| 6 | 253.109 | 253.104 | 253.116 | 253.138 | 253.073 | 253.078 | 253.073 | 253.020 | 252.810 | 253.188 | 252.700 | 252.862 | 6 |
| 7 | 253.117 | 253.118 | 253.117 | 253.150 | 253.178 | 253.170 | 252.994 | 252.861 | 252.848 | 252.838 | 252.878 | 252.866 | 7 |
| 8 | 253.102 | 253.100 | 253.118 | 253.141 | 253.140 | 253.051 | 253.067 | 252.938 | 252.878 | 252.701 | 252.834 | 252.868 | 8 |
| 9 | 253.098 | 253.108 | 253.113 | 253.136 | 253.130 | 253.012 | 253.038 | 252.906 | 253.007 | 252.804 | 252.843 | 252.867 | 9 |
| 10 | 253.098 | 253.103 | 253.130 | 253.132 | 253.074 | 253.032 | 253.061 | 252.938 | 252.861 | 252.787 | 252.788 | 252.890 | 10 |
| 11 | 253.101 | 253.098 | 253.144 | 253.134 | 253.021 | 253.113 | 253.010 | 252.800 | 253.032 | 252.826 | 253.033 | 252.854 | 11 |
| 12 | 253.100 | 253.098 | 253.127 | 253.122 | 253.062 | 253.148 | 253.080 | 252.878 | 252.853 | 252.856 | 252.918 | 252.868 | 12 |
| 13 | 253.085 | 253.114 | 253.124 | 253.140 | 253.092 | 253.246 | 253.039 | 253.068 | 252.848 | 252.833 | 252.855 | 252.862 | 13 |
| 14 | 253.118 | 253.111 | 253.128 | 253.133 | 253.128 | 253.035 | 253.017 | 252.914 | 252.861 | 252.863 | 252.862 | 252.855 | 14 |
| 15 | 253.093 | 253.104 | 253.127 | 253.128 | 253.117 | 252.881 | 253.004 | 252.888 | 252.827 | 253.008 | 252.856 | 252.858 | 15 |
| 16 | 253.108 | 253.105 | 253.123 | 253.149 | 253.080 | 252.870 | 252.971 | 252.888 | 252.888 | 252.856 | 252.851 | 252.867 | 16 |
| 17 | 253.107 | 253.100 | 253.121 | 253.126 | 253.054 | 253.026 | 253.008 | 252.822 | 252.874 | 252.886 | 252.862 | 252.856 | 17 |
| 18 | 253.102 | 253.098 | 253.117 | 253.136 | 253.084 | 253.050 | 253.011 | 252.883 | 253.152 | 252.834 | 252.849 | 252.862 | 18 |
| 19 | 253.118 | 253.108 | 253.127 | 253.137 | 253.063 | 252.879 | 252.964 | 253.168 | 252.880 | 252.847 | 252.851 | 252.856 | 19 |
| 20 | 253.100 | 253.104 | 253.122 | 253.143 | 253.002 | 253.020 | 252.978 | 252.938 | 252.824 | 252.813 | 252.861 | 252.853 | 20 |
| 21 | 253.108 | 253.118 | 253.124 | 253.127 | 253.122 | 253.082 | 252.906 | 252.788 | 252.895 | 252.706 | 252.888 | 252.857 | 21 |
| 22 | 253.110 | 253.094 | 253.127 | 253.138 | 253.140 | 253.108 | 252.797 | 252.857 | 253.233 | 252.833 | 252.848 | 252.844 | 22 |
| 23 | 253.110 | 253.094 | 253.121 | 253.141 | 253.151 | 253.028 | 253.031 | 252.816 | 252.744 | 252.825 | 252.864 | 252.848 | 23 |
| 24 | 253.105 | 253.117 | 253.122 | 253.148 | 253.136 | 253.062 | 252.948 | 252.800 | 252.802 | 252.785 | 252.864 | 252.858 | 24 |
| 25 | 253.105 | 253.130 | 253.141 | 253.145 | 253.437 | 253.058 | 252.957 | 252.888 | 253.114 | 252.786 | 252.864 | 252.869 | 25 |
| 26 | 253.080 | 253.117 | 253.145 | 253.148 | 253.203 | 253.084 | 253.128 | 252.865 | 252.730 | 252.884 | 252.865 | 252.855 | 26 |
| 27 | 253.081 | 253.114 | 253.137 | 253.150 | 253.057 | 253.069 | 252.989 | 252.880 | 252.739 | 253.092 | 252.881 | 252.858 | 27 |
| 28 | 253.086 | 253.120 | 253.139 | 253.151 | 253.184 | 252.814 | 252.856 | 252.968 | 253.001 | 252.859 | 252.847 | 252.875 | 28 |
| 29 | 253.084 | | 253.140 | 253.167 | 253.038 | 253.021 | 252.907 | 253.233 | 252.838 | 252.938 | 252.853 | 252.845 | 29 |
| 30 | 253.126 | | 253.130 | 253.134 | 253.085 | 252.984 | 252.868 | 252.847 | 252.893 | 252.885 | 252.862 | 252.855 | 30 |
| 31 | 253.123 | | 253.120 | | 253.104 | | 252.928 | 252.883 | | 252.885 | | 252.872 | 31 |
| MEAN | 253.102 | 253.107 | 253.125 | 253.138 | 253.121 | 253.073 | 252.987 | 252.843 | 252.825 | 252.876 | 252.862 | 252.860 | MEAN |
| MAX | 253.126 | 253.130 | 253.145 | 253.167 | 253.437 | 253.246 | 253.128 | 253.282 | 253.233 | 253.311 | 253.038 | 252.875 | MAX |
| MIN | 253.080 | 253.094 | 253.112 | 253.122 | 253.002 | 252.870 | 252.787 | 252.788 | 252.730 | 252.647 | 252.788 | 252.844 | MIN |

WATER LEVELS IN METRES

SUMMARY FOR THE YEAR 1988

MEAN, 253.010
MAXIMUM DAILY, 253.446 ON JUN 12
MINIMUM DAILY, 252.647 ON OCT 18
MAXIMUM INSTANTANEOUS,
253.771 AT 17:41 CST ON JUN 12

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 38 45 N
LONG 99 55 07 W

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1928 ADJ.)

DRAINAGE AREA,
53 500 km²

## LIMESTONE RIVER NEAR BIRD - STATION NO. 05UG001

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.658 | 1.838 | 1.828 | 1.868 | 2.778 | 83.1 | 16.3 | 14.0 | 13.0 | 14.5 | 12.9 B | 5.858 | 1 |
| 2 | 3.318 | 1.838 | 1.848 | 2.018 | 2.688 | 84.1 | 20.8 | 12.7 | 11.4 | 13.7 | 11.8 B | 5.448 | 2 |
| 3 | 3.188 | 1.808 | 1.848 | 2.038 | 2.908 | 83.4 | 31.0 | 11.8 | 10.5 | 12.7 | 12.0 B | 5.268 | 3 |
| 4 | 3.088 | 1.808 | 1.848 | 2.088 | 3.848 | 48.3 | 86.7 | 11.0 | 11.8 | 12.4 | 12.3 B | 4.878 | 4 |
| 5 | 3.028 | 1.808 | 1.848 | 2.098 | 3.288 | 48.8 | 71.4 | 10.0 | 10.8 | 12.0 | 12.8 B | 4.418 | 5 |
| 6 | 2.868 | 1.808 | 1.848 | 2.118 | 3.828 | 42.7 | 78.0 | 10.0 | 8.88 | 12.8 | 13.4 B | 4.348 | 6 |
| 7 | 2.808 | 1.808 | 1.878 | 2.148 | 3.868 | 39.7 | 76.7 | 10.2 | 10.8 | 12.4 | 13.7 B | 4.308 | 7 |
| 8 | 2.838 | 1.778 | 1.878 | 2.178 | 4.888 | 38.2 | 88.8 | 9.43 | 10.7 | 12.8 | 14.3 B | 4.138 | 8 |
| 9 | 2.778 | 1.778 | 1.878 | 2.208 | 5.858 | 36.0 | 88.8 | 8.82 | 10.8 | 14.7 | 14.0 B | 3.858 | 9 |
| 10 | 2.708 | 1.758 | 1.708 | 2.258 | 7.158 | 33.3 | 48.4 | 8.14 | 10.0 | 16.2 | 13.8 B | 3.788 | 10 |
| 11 | 2.648 | 1.758 | 1.708 | 3.288 | 17.5 B | 31.0 | 42.8 | 8.04 | 10.4 | 15.8 | 13.3 B | 3.838 | 11 |
| 12 | 2.588 | 1.728 | 1.728 | 2.308 | 172 B | 30.1 | 38.4 | 7.89 | 10.8 | 15.8 | 12.9 B | 3.838 | 12 |
| 13 | 2.528 | 1.708 | 1.758 | 2.308 | 334 B | 29.1 | 36.1 | 7.08 | 10.8 | 15.1 | 12.6 B | 3.358 | 13 |
| 14 | 2.458 | 1.678 | 1.758 | 2.338 | 271 B | 27.4 | 31.0 | 8.75 | 10.8 | 13.0 | 12.2 B | 3.228 | 14 |
| 15 | 2.388 | 1.678 | 1.758 | 2.338 | 253 | 26.1 | 28.1 | 8.86 | 10.4 | 14.1 | 11.8 B | 3.028 | 15 |
| 16 | 2.388 | 1.678 | 1.778 | 2.338 | 221 | 25.0 | 25.5 | 8.88 | 10.5 | 13.0 | 11.3 B | 2.988 | 16 |
| 17 | 2.338 | 1.678 | 1.778 | 2.338 | 187 | 23.3 | 23.1 | 8.38 | 10.0 | 13.7A | 10.8 B | 2.858 | 17 |
| 18 | 2.338 | 1.678 | 1.778 | 2.338 | 165 | 26.0 | 22.2 | 8.16 | 10.0 | 13.8E | 9.888 | 2.748 | 18 |
| 19 | 2.308 | 1.678 | 1.808 | 2.338 | 184 | 26.5 | 21.0 | 8.17 | 10.4 | 13.8E | 9.548 | 2.848 | 19 |
| 20 | 2.258 | 1.678 | 1.808 | 2.388 | 163 | 32.0 | 19.3 | 8.34 | 10.0 | 14.0E | 9.428 | 3.858 | 20 |
| 21 | 2.208 | 1.648 | 1.808 | 2.388 | 158 | 36.2 | 17.1 | 8.12 | 10.0 | 14.3E | 9.188 | 3.428 | 21 |
| 22 | 2.178 | 1.628 | 1.838 | 2.428 | 148 | 35.5 | 16.5 | 8.57 | 10.4 | 13.8E | 8.848 | 3.338 | 22 |
| 23 | 2.118 | 1.698 | 1.838 | 3.468 | 138 | 33.3 | 15.3 | 8.32 | 10.7 | 13.3E | 8.448 | 3.288 | 23 |
| 24 | 2.088 | 1.698 | 1.858 | 2.488 | 128 | 30.8 | 14.4 | 8.77 | 10.1 | 14.8E | 7.978 | 3.208 | 24 |
| 25 | 2.038 | 1.698 | 1.888 | 2.488 | 118 | 28.4 | 13.8 | 4.80 | 17.8 | 14.0E | 7.838 | 3.118 | 25 |
| 26 | 1.988 | 1.698 | 1.888 | 2.558 | 108 | 26.8 | 13.3 | 8.85 | 10.8 | 13.8E | 7.158 | 3.088 | 26 |
| 27 | 1.938 | 1.698 | 1.888 | 2.588 | 98.3 | 23.6 | 14.0 | 7.40 | 17.0 | 13.8E | 6.878 | 3.038 | 27 |
| 28 | 1.888 | 1.698 | 1.888 | 2.588 | 88.3 | 22.1 | 18.0 | 11.2 | 16.8 | 12.2E | 6.508 | 1.988 | 28 |
| 29 | 1.858 | | 1.838 | 2.618 | 78.0 | 19.8 | 18.8 | 14.0 | 16.3 | 13.8E | 6.258 | 1.908 | 29 |
| 30 | 1.858 | | 1.888 | 2.648 | 78.3 | 17.6 | 15.6 | 14.5 | 18.2 | 14.8E | 6.068 | 1.488 | 30 |
| 31 | 1.858 | | 1.888 | | 88.7 | | 14.7 | 14.3 | | 15.8E | | 1.638 | 31 |
| TOTAL | 78.27 | 47.61 | 54.80 | 69.46 | 3 236.82 | 1 008.5 | 880.4 | 288.58 | 471.28 | 431.6 | 318.68 | 99.58 | TOTAL |
| MEAN | 2.48 | 1.70 | 1.77 | 2.32 | 104 | 33.6 | 31.8 | 8.86 | 15.7 | 13.9 | 10.6 | 3.21 | MEAN |
| MAX | 3.66 | 1.83 | 1.86 | 3.64 | 324 | 83.1 | 78.0 | 14.8 | 18.4 | 16.8 | 14.3 | 5.86 | MAX |
| MIN | 1.85 | 1.69 | 1.82 | 1.86 | 2.77 | 17.6 | 13.3 | 4.80 | 8.88 | 12.0 | 6.06 | 1.63 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

SUMMARY FOR THE YEAR 1988

MEAN, 18.3
MAXIMUM DAILY, 3248 ON MAY 13
MINIMUM DAILY, 1.688 ON FEB 23

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 31 10 N
LONG 94 12 30 W
DRAINAGE AREA, 3 280 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 8 590 | JUL | 84 700 |
| FEB | 4 110 | AUG | 23 200 |
| MAR | 6 730 | SEP | 40 700 |
| APR | 0 000 | OCT | 37 300 |
| MAY | 279 000 | NOV | 27 600 |
| JUN | 87 000 | DEC | 8 600 |

TOTAL DISCHARGE, 610 000 dam³

## LITTLE BEAVER RIVER NEAR THE MOUTH - STATION NO. 09FB002

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.130 | 2.100 | 1.700 | 1.350 | 1.210 | 134 | 61.8 | 29.0 | 47.4 | 24.4 | 13.6 B | 4.210 | 1 |
| 2 | 2.090 | 2.080 | 1.670 | 1.320 | 1.330 | 128 | 60.6 | 26.5 | 46.0 | 23.2 | 13.6 B | 3.880 | 2 |
| 3 | 2.050 | 2.070 | 1.660 | 1.320 | 1.330 | 118 | 58.2 | 24.5 | 42.4 | 21.5 | 13.5 B | 3.690 | 3 |
| 4 | 2.010 | 2.060 | 1.650 | 1.310 | 1.320 | 110 | 57.3 | 22.5 | 38.9 | 21.0 | 13.4 B | 3.530 | 4 |
| 5 | 2.710 | 2.060 | 1.630 | 1.310 | 1.460 | 104 | 58.3 | 20.9 | 37.8 | 21.6 | 13.0 B | 3.540 | 5 |
| 6 | 2.040 | 2.060 | 1.620 | 1.300 | 1.820 | 98.1 | 59.9 | 19.9 | 38.9 | 21.4 | 12.6 B | 3.400 | 6 |
| 7 | 2.010 | 2.050 | 1.610 | 1.300 | 1.710 | 93.1 | 59.2 | 18.7 | 38.1 | 21.0 | 12.1 B | 3.330 | 7 |
| 8 | 2.560 | 2.030 | 1.610 | 1.260 | 1.900 | 86.3 | 56.2 | 17.9 | 35.9 | 20.6 | 11.6 B | 3.170 | 8 |
| 9 | 2.570 | 2.030 | 1.580 | 1.270 | 2.160 | 83.2 | 52.3 | 18.9 | 35.3 | 20.3 | 11.4 B | 3.060 | 9 |
| 10 | 2.560 | 2.020 | 1.580 | 1.270 | 2.440 | 78.0 | 48.8 | 18.0 | 34.8 | 20.0 | 10.8 B | 2.920 | 10 |
| 11 | 2.550 | 2.010 | 1.570 | 1.280 | 2.860 | 76.0 | 46.9 | 16.3 | 34.3 | 20.1 | 10.5 B | 2.850 | 11 |
| 12 | 2.540 | 1.990 | 1.560 | 1.240 | 3.490 | 71.0 | 42.4 | 16.0 | 34.1 | 20.6 | 10.2 B | 2.710 | 12 |
| 13 | 2.540 | 1.980 | 1.540 | 1.230 | 10.8 B | 67.2 | 39.8 | 16.4 | 33.8 | 20.6 | 9.760 | 2.670 | 13 |
| 14 | 2.460 | 1.970 | 1.520 | 1.220 | 68.6 B | 63.7 | 38.8 | 16.4 | 32.9 | 20.2 | 9.390 | 2.560 | 14 |
| 15 | 2.420 | 1.940 | 1.510 | 1.220 | 245 B | 60.2 | 34.8 | 16.9 | 32.2 | 19.9 | 9.020 | 2.370 | 15 |
| 16 | 2.400 | 1.900 | 1.500 | 1.220 | 258 | 58.4 | 32.9 | 15.2 | 31.7 | 18.1 | 8.440 | 2.300 | 16 |
| 17 | 2.370 | 1.890 | 1.500 | 1.210 | 244 | 55.3 | 30.5 | 14.3 | 31.1 | 18.7 | 8.060 | 2.180 | 17 |
| 18 | 2.340 | 1.870 | 1.500 | 1.210 | 241 | 53.3 | 28.5 | 14.1 | 31.1 | 18.3 | 7.720 | 2.100 | 18 |
| 19 | 2.330 | 1.860 | 1.480 | 1.210 | 263 | 147 | 26.8 | 14.6 | 30.9 | 20.6 | 7.180 | 2.020 | 19 |
| 20 | 2.330 | 1.830 | 1.470 | 1.210 | 244 | 184 | 25.0 | 14.8 | 30.4 | 19.3 | 6.980 | 1.980 | 20 |
| 21 | 2.320 | 1.820 | 1.460 | 1.210 | 236 | 148 | 23.1 | 14.3 | 30.0 | 18.7 | 6.680 | 1.630 | 21 |
| 22 | 2.330 | 1.810 | 1.440 | 1.210 | 231 | 133 | 22.0 | 14.1 | 29.6 | 18.6 | 6.200 | 1.770 | 22 |
| 23 | 2.300 | 1.780 | 1.430 | 1.200 | 223 | 121 | 20.8 | 13.7 | 29.2 | 18.3 | 6.010 | 1.710 | 23 |
| 24 | 2.280 | 1.780 | 1.420 | 1.200 | 215 | 111 | 19.5 | 13.8 | 28.8 | 18.1 | 5.780 | 1.630 | 24 |
| 25 | 2.260 | 1.780 | 1.400 | 1.200 | 211 | 102 | 18.2 | 14.4 | 28.4 | 18.3 | 5.480 | 1.540 | 25 |
| 26 | 2.260 | 1.770 | 1.390 | 1.200 | 203 | 93.0 | 23.0 | 21.3 | 27.7 | 18.5 | 5.260 | 1.500 | 26 |
| 27 | 2.240 | 1.760 | 1.380 | 1.190 | 191 | 84.8 | 36.3 | 35.5 | 27.1 | 18.3 | 5.000 | 1.430 | 27 |
| 28 | 2.210 | 1.740 | 1.360 | 1.180 | 179 | 77.4 | 38.8 | 46.5 | 26.8 | 18.3 | 4.800 | 1.340 | 28 |
| 29 | 2.180 | | 1.350 | 1.180 | 167 | 71.0 | 37.1 | 45.5 | 26.4 | 17.0 | 4.630 | 1.270 | 29 |
| 30 | 2.170 | | 1.340 | 1.190 | 155 | 66.4 | 34.2 | 45.8 | 25.5 | 16.6 | 4.380 | 1.230 | 30 |
| 31 | 2.130 | | 1.360 | | 143 | | 31.4 | 46.9 | | 14.3 | | 1.200 | 31 |
| TOTAL | 76.45 | 54.04 | 46.64 | 37.33 | 3 738.88 | 2 881.4 | 1 219.5 | 887.1 | 992.9 | 604.5 | 287.18 | 75.19 | TOTAL |
| MEAN | 2.47 | 1.93 | 1.51 | 1.24 | 121 | 96.0 | 39.3 | 22.3 | 33.1 | 19.5 | 9.91 | 2.43 | MEAN |
| MAX | 3.13 | 2.10 | 1.70 | 1.35 | 258 | 184 | 61.8 | 46.5 | 47.4 | 24.4 | 13.6 | 4.21 | MAX |
| MIN | 2.13 | 1.74 | 1.36 | 1.18 | 1.21 | 66.3 | 18.2 | 13.8 | 25.5 | 14.2 | 4.38 | 1.20 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 29.3
MAXIMUM DAILY, 258 ON MAY 16
MINIMUM DAILY, 1.18B ON APR 29
MAXIMUM INSTANTANEOUS,
280 AT 19:00 CST ON MAY 16

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 57 39 10 N
LONG 95 38 50 W
DRAINAGE AREA, 4 260 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 6 510 | JUL | 105 000 |
| FEB | 4 570 | AUG | 88 400 |
| MAR | 4 050 | SEP | 88 800 |
| APR | 3 220 | OCT | 52 200 |
| MAY | 323 000 | NOV | 23 100 |
| JUN | 249 000 | DEC | 6 500 |

TOTAL DISCHARGE, 933 000 dam³

## LITTLE CHURCHILL RIVER ABOVE RECLUSE LAKE - STATION NO. 08FC001

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.8 | 14.5 | 13.8 | 9.38E | 10.0E | 112 | 73.9 | 44.1 | 23.8E | 17.0E | 11.8 | 8.34 | 1 |
| 2 | 17.8 | 15.1 | 13.7 | 9.30E | 10.8E | 110 | 73.4 | 43.2 | 23.3E | 16.8E | 10.8 | 8.30 | 2 |
| 3 | 17.8 | 15.8 | 13.8 | 9.28E | 11.3E | 107 | 74.6 | 42.0 | 22.8E | 16.6E | 10.6 | 8.55 | 3 |
| 4 | 17.7 | 16.6 | 13.6 | 9.20E | 12.4E | 106 | 77.2 | 41.0 | 22.6E | 16.7E | 10.7 | 8.81 | 4 |
| 5 | 17.6 | 17.0 | 12.8 | 9.20E | 13.3E | 101 | 80.4 | 39.1 | 22.4E | 16.3E | 11.0 | 8.83 | 5 |
| 6 | 17.2 | 17.0 | 12.4 | 9.20E | 17.1E | 97.6 | 82.3 | 37.3 | 21.8E | 16.0E | 11.2 | 8.74 | 6 |
| 7 | 16.6 | 17.0 | 12.7 | 9.15E | 21.5E | 94.6 | 82.3 | 35.8 | 21.6E | 15.9E | 11.3 | 8.73 | 7 |
| 8 | 16.4 | 16.8 | 12.8 | 9.10E | 27.5E | 91.8 | 81.1 | 34.8 | 21.5E | 15.7E | 11.5 | 8.77 | 8 |
| 9 | 16.1 | 16.8 | 13.5 | 9.10E | 47.6E | 88.7 | 79.6 | 34.0 | 21.3E | 15.6E | 11.6 | 8.82 | 9 |
| 10 | 16.1 | 17.0 | 13.1 | 9.05E | 72.3E | 85.9 | 77.2 | 33.1 | 21.1E | 15.3E | 11.7 | 8.93 | 10 |
| 11 | 16.0 | 16.9 | 11.8 | 9.05E | 88.0E | 84.7 | 75.7 | 33.4 | 20.8E | 15.1E | 11.7 | 8.90 | 11 |
| 12 | 15.8 | 16.4 | 11.6 | 9.00E | 115 E | 82.6 | 73.3 | 33.3 | 20.7E | 14.8E | 11.8 | 8.95 | 12 |
| 13 | 15.8 | 15.8 | 11.3 | 9.00E | 138 A | 81.1 | 71.2 | 30.6 | 20.6E | 14.8E | 11.5 | 8.75A | 13 |
| 14 | 15.8 | 15.1 | 10.8 | 9.00E | 162 A | 79.5 | 68.9 | 29.6 | 20.3E | 14.6E | 11.2 | 8.63 | 14 |
| 15 | 15.1 | 14.6 | 10.6 | 8.95E | 173 A | 77.8 | 66.7 | 28.6 | 20.0E | 14.3E | 10.9 | 8.46 | 15 |
| 16 | 14.8 | 14.3 | 10.8 | 8.85E | 167 | 76.2 | 65.3 | 27.7 | 19.8E | 14.0A | 10.5 | 8.32 | 16 |
| 17 | 14.6 | 14.0 | 10.6 | 8.85E | 159 | 75.4 | 63.6 | 27.7A | 19.5E | 13.8 | 10.2 | 8.06A | 17 |
| 18 | 14.8 | 14.0 | 10.7 | 8.80E | 153 | 73.5 | 61.6 | 27.0E | 19.6E | 13.6 | 9.84 | 7.86E | 18 |
| 19 | 14.5 | 13.8 | 10.7 | 8.05E | 148 | 85.2 | 59.7 | 26.9E | 19.2E | 13.7 | 9.44 | 7.81E | 19 |
| 20 | 14.5 | 13.7 | 10.8 E | 8.10E | 148 | 91.7 | 57.7 | 24.8E | 19.0E | 12.3 | 9.18 | 7.36A | 20 |
| 21 | 14.8 | 13.3 | 10.4 E | 8.15E | 144 | 94.8 | 55.8 | 24.0E | 18.8E | 13.5 | 8.89 | 7.18 | 21 |
| 22 | 15.0 | 13.2 | 10.3 E | 8.15E | 145 | 94.4 | 55.1 | 23.9E | 18.6E | 13.4 | 8.71 | 7.22 | 22 |
| 23 | 14.8 | 13.3 | 10.2 E | 8.15E | 146 | 93.7 | 53.3 | 22.1E | 18.3E | 13.3 | 8.65 | 7.14 | 23 |
| 24 | 14.5 | 13.2 | 10.1 E | 8.20E | 145 | 90.9 | 50.8 | 21.3E | 18.3E | 13.2 | 8.60 | 7.18A | 24 |
| 25 | 14.4 | 13.0 | 9.80E | 8.20E | 141 | 88.2 | 49.5 | 20.7E | 18.1E | 13.2 | 8.58 | 7.14E | 25 |
| 26 | 14.8 | 12.8 | 9.68E | 8.25E | 138 | 85.3 | 48.9 | 19.6E | 17.9E | 12.9 | 8.46 | 6.94A | 26 |
| 27 | 14.6 | 12.8 | 9.70E | 8.35E | 131 | 82.9 | 48.5 | 20.3E | 17.7E | 13.0 | 8.41 | 6.82A | 27 |
| 28 | 14.2 | 12.6 | 9.73E | 8.40E | 126 | 79.4 | 48.4 | 21.3E | 17.9E | 14.3 | 8.42 | 6.93A | 28 |
| 29 | 14.2 | | 9.70A | 8.57E | 121 | 76.2 | 47.5 | 22.2E | 17.4E | 13.4 | 8.48 | 6.59A | 29 |
| 30 | 14.1 | | 9.57E | 8.78E | 117 | 73.8 | 46.5 | 23.8E | 17.1E | 13.0 | 8.42 | 6.88A | 30 |
| 31 | 14.1 | | 9.41E | | 115 | | 44.9 | 24.0E | | 12.7 | | 6.80A | 31 |
| TOTAL | 482.2 | 416.9 | 343.68 | 276.23 | 3 180.3 | 2 888.8 | 1 995.8 | 914.8 | 600.7 | 448.4 | 303.78 | 245.88 | TOTAL |
| MEAN | 15.6 | 14.8 | 11.1 | 9.17 | 102 | 96.9 | 64.4 | 29.5 | 20.0 | 14.5 | 10.1 | 7.93 | MEAN |
| MAX | 17.8 | 17.0 | 12.8 | 9.78 | 173 | 112 | 82.3 | 44.1 | 23.8 | 17.0 | 11.8 | 8.90 | MAX |
| MIN | 14.1 | 12.6 | 9.41 | 8.85 | 10.0 | 73.8 | 44.9 | 19.6 | 17.1 | 12.7 | 8.41 | 6.59 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 32.6
MAXIMUM DAILY, 173A ON MAY 15
MINIMUM DAILY, 6.59A ON DEC 30
MAXIMUM INSTANTANEOUS,
173 AT 06:36 CST ON MAY 25

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 56 56 12 N
LONG 96 46 47 W
DRAINAGE AREA, 5 810 km²
A - MANUAL GAUGE

E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 41 700 | JUL | 172 000 |
| FEB | 38 000 | AUG | 78 000 |
| MAR | 28 700 | SEP | 51 800 |
| APR | 23 600 | OCT | 36 600 |
| MAY | 273 000 | NOV | 26 300 |
| JUN | 330 000 | DEC | 21 300 |

TOTAL DISCHARGE, 1 020 000 dam³

## LITTLE SASKATCHEWAN RIVER ABOVE RAPID CITY DAM - STATION NO. 05MF001

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | 478.588E | 478.582E | 478.542 | --- | 1 |
| 2 | --- | 478.577 | --- | --- | --- | --- | --- | --- | 478.585E | 478.582 | 478.542E | --- | 2 |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | 478.582 | 478.582E | 478.542 | --- | 3 |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | 478.582E | 478.582 | 478.550E | --- | 4 |
| 5 | 478.541 | --- | --- | --- | --- | --- | --- | --- | 478.582 | 478.580E | 478.588E | --- | 5 |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | 478.582E | 478.547 | 478.587 | --- | 6 |
| 7 | --- | --- | --- | --- | --- | --- | --- | --- | 478.582 | 478.550E | 478.576E | --- | 7 |
| 8 | --- | --- | --- | --- | --- | --- | --- | --- | 478.578E | 478.552E | 478.582 | --- | 8 |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | 478.577E | 478.588E | 478.582E | --- | 9 |
| 10 | --- | --- | --- | 478.576 | --- | --- | --- | --- | 478.586E | 478.587E | 478.602 | --- | 10 |
| 11 | --- | --- | --- | --- | 478.622 | --- | --- | --- | 478.582 | 478.580E | 478.600E | --- | 11 |
| 12 | --- | --- | --- | --- | --- | --- | 478.604 | --- | 478.582 | 478.582 | 478.588E | 478.581 | 12 |
| 13 | --- | --- | --- | --- | --- | --- | --- | --- | 478.582 | 478.587E | 478.587 | --- | 13 |
| 14 | --- | --- | --- | --- | --- | --- | --- | 478.582 | 478.582E | 478.582E | 478.600E | --- | 14 |
| 15 | --- | --- | --- | --- | --- | --- | --- | 478.582E | 478.582 | 478.547E | 478.602 | --- | 15 |
| 16 | --- | --- | --- | --- | --- | --- | --- | 478.582 | 478.577E | 478.542 | 478.582E | --- | 16 |
| 17 | --- | --- | --- | --- | --- | --- | --- | 478.582E | 478.572E | 478.542E | 478.582 | --- | 17 |
| 18 | --- | --- | --- | --- | --- | --- | --- | 478.544 | 478.567 | 478.542 | 478.584E | --- | 18 |
| 19 | --- | --- | --- | 478.598 | --- | --- | --- | 478.567E | 478.586E | 478.542E | 478.586E | --- | 19 |
| 20 | --- | --- | --- | --- | --- | --- | --- | 478.588E | 478.582 | 478.542 | 478.587E | --- | 20 |
| 21 | --- | --- | --- | --- | --- | 478.767 | --- | 478.572 | 478.582E | 478.542E | 478.588E | --- | 21 |
| 22 | --- | 478.566 | --- | --- | --- | --- | --- | 478.570E | 478.582 | 478.542E | 478.590 | --- | 22 |
| 23 | --- | --- | --- | --- | --- | --- | --- | 478.567 | 478.558E | 478.542 | --- | --- | 23 |
| 24 | --- | --- | --- | --- | --- | --- | --- | 478.580E | 478.548E | 478.540 | --- | --- | 24 |
| 25 | --- | --- | --- | --- | 478.604 | --- | --- | 478.582 | 478.542 | 478.542 | --- | --- | 25 |
| 26 | 478.547 | --- | --- | 478.640 | --- | --- | --- | 478.580E | 478.545 | 478.542E | --- | --- | 26 |
| 27 | --- | --- | --- | --- | --- | --- | --- | 478.588E | 478.542 | 478.542 | --- | --- | 27 |
| 28 | --- | --- | --- | --- | --- | --- | --- | 478.567 | 478.547E | 478.542E | --- | --- | 28 |
| 29 | --- | | --- | --- | --- | --- | --- | 478.580E | 478.552 | 478.542E | --- | --- | 29 |
| 30 | --- | | 478.644 | --- | --- | --- | --- | 478.572 | 478.552E | 478.542 | --- | --- | 30 |
| 31 | --- | | --- | | --- | | --- | 478.572 | | 478.542E | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | --- | --- | --- | 478.582 | 478.547 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | --- | --- | 478.582 | 478.582 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | --- | --- | --- | 478.542 | 478.540 | --- | --- | MIN |

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - MANUAL
LOCATION - LAT. 50 07 15 N
LONG 100 03 24 W

DATA CONTRIBUTED BY - MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1962

DRAINAGE AREA, 3 250 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## LITTLE SASKATCHEWAN RIVER NEAR MINNEDOSA - STATION NO. 05MF001

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.1268 | 0.1008 | 0.0588 | 0.3888 | 2.81 | 1.80 | 3.42 | 0.378 | 0.415 | 0.101 | 0.3618 | 0.3630 | 1 |
| 2 | 0.1148 | 0.0938 | 0.0588 | 0.3048 | 2.58 | 1.84 | 3.00 | 0.328 | 0.403 | 0.107 | 0.2948 | 0.3708 | 2 |
| 3 | 0.1098 | 0.0908 | 0.0608 | 0.2908 | 2.40 | 1.68 | 2.58 | 0.305 | 0.424 | 0.138 | 0.2818 | 0.3468 | 3 |
| 4 | 0.1058 | 0.0908 | 0.0638 | 0.2958 | 2.24 | 1.41 | 2.24 | 0.267 | 0.355 | 0.184 | 0.3068 | 0.3278 | 4 |
| 5 | 0.1018 | 0.0908 | 0.0638 | 0.1788 | 1.94 | 1.28 | 1.98 | 0.291 | 0.235 | 0.168 | 0.3068 | 0.3088 | 5 |
| 6 | 0.0938 | 0.0808 | 0.0658 | 0.0848 | 1.70 | 1.20 | 1.68 | 0.273 | 0.206 | 0.139 | 0.3048 | 0.3078 | 6 |
| 7 | 0.0858 | 0.0808 | 0.0658 | 0.1928 | 1.78 | 1.16 | 1.50 | 0.249 | 0.176 | 0.331 | 0.3268 | 0.3738 | 7 |
| 8 | 0.0858 | 0.0808 | 0.0708 | 0.1788 | 1.80 | 0.983 | 1.58 | 0.212 | 0.228 | 0.238 | 0.3868 | 0.3178 | 8 |
| 9 | 0.0988 | 0.0858 | 0.0738 | 0.2888 | 1.38 | 0.789 | 1.38 | 0.195 | 0.278 | 0.149 | 0.3678 | 0.3148 | 9 |
| 10 | 0.1168 | 0.0858 | 0.0838 | 0.3848 | 1.08 | 0.734 | 1.22 | 0.178 | 0.302 | 0.102 | 0.3728 | 0.3308 | 10 |
| 11 | 0.1328 | 0.0908 | 0.0838 | 0.5958 | 0.840 | 0.788 | 1.13 | 0.113 | 0.280 | 0.184 | 0.4108 | 0.3488 | 11 |
| 12 | 0.1138 | 0.0838 | 0.0888 | 1.01 E | 0.650 | 0.645 | 1.26 | 0.131 | 0.223 | 0.178 | 0.4488 | 0.3418 | 12 |
| 13 | 0.1138 | 0.0888 | 0.0788 | 0.9708 | 0.832 | 1.06 | 1.44 | 0.186 | 0.221 | 0.091 | 0.4588 | 0.3158 | 13 |
| 14 | 0.1088 | 0.1038 | 0.0788 | 1.26 E | 1.18 | 1.48 | 1.86 | 0.184 | 0.225 | 0.080 | 0.4528 | 0.2568 | 14 |
| 15 | 0.1018 | 0.1008 | 0.0738 | 1.15 E | 1.18 | 3.48 | 2.42 | 0.206 | 0.188 | 0.071 | 0.4378 | 0.2078 | 15 |
| 16 | 0.1038 | 0.0888 | 0.0708 | 1.58 E | 1.08 | 5.12 | 3.84 | 0.188 | 0.183 | 0.210 | 0.4288 | 0.1908 | 16 |
| 17 | 0.1068 | 0.0838 | 0.0888 | 2.50 E | 1.08 | 6.77 | 3.46 | 0.237 | 0.188 | 0.177 | 0.4088 | 0.2108 | 17 |
| 18 | 0.1008 | 0.0808 | 0.0888 | 3.57 E | 1.11 | 7.88 | 3.07 | 0.378 | 0.488 | 0.118 | 0.4088 | 0.2228 | 18 |
| 19 | 0.0868 | 0.0868 | 0.0858 | 3.80 E | 1.08 | 8.74 | 1.74 | 0.412 | 0.320 | 0.180 | 0.4208 | 0.2118 | 19 |
| 20 | 0.0848 | 0.0858 | 0.0838 | 4.01 | 1.14 | 8.78 | 1.81 | 0.407 | 0.187 | 0.274 | 0.4228 | 0.1878 | 20 |
| 21 | 0.0878 | 0.0808 | 0.0838 | 3.83 | 1.10 | 7.83 | 1.31 | 0.423 | 0.144 | 0.284 | 0.4088 | 0.1488 | 21 |
| 22 | 0.0878 | 0.0788 | 0.0838 | 3.87 | 1.02 | 6.12 | 1.07 | 0.385 | 0.256 | 0.234 | 0.4048 | 0.1448 | 22 |
| 23 | 0.0848 | 0.0738 | 0.0888 | 3.83 | 0.882 | 4.88 | 0.826 | 0.332 | 0.233 | 0.208 | 0.4078 | 0.1368 | 23 |
| 24 | 0.0828 | 0.0788 | 0.0868 | 3.38 | 0.888 | 4.17 | 0.661 | 0.288 | 0.158 | 0.196 | 0.4128 | 0.1168 | 24 |
| 25 | 0.1128 | 0.0788 | 0.0868 | 3.47 | 1.18 | 3.88 | 0.858 | 0.287 | 0.118 | 0.208 | 0.4178 | 0.1488 | 25 |
| 26 | 0.1218 | 0.0738 | 0.0868 | 3.47 | 1.18 | 3.73 | 0.793 | 0.244 | 0.081 | 0.148 | 0.4208 | 0.1548 | 26 |
| 27 | 0.1238 | 0.0858 | 0.0708 | 3.37 | 1.10 | 3.84 | 0.717 | 0.217 | 0.202 | 0.188 | 0.4158 | 0.1378 | 27 |
| 28 | 0.1188 | 0.0878 | 0.0758 | 3.26 | 1.05 | 3.84 | 0.688 | 0.242 | 0.108 | 0.273 | 0.3648 | 0.1838 | 28 |
| 29 | 0.1198 | | 0.0838 | 3.11 | 1.21 | 3.88 | 0.611 | 0.282 | 0.080 | 0.328 | 0.3858 | 0.2728 | 29 |
| 30 | 0.1158 | | 0.0868 | 3.88 | 1.21 | 3.73 | 0.512 | 0.188 | 0.100 | 0.3838 | 0.3738 | 0.2888 | 30 |
| 31 | 0.1138 | | 0.1038 | | 1.30 | | 0.481 | 0.184 | | 0.3828 | | 0.3148 | 31 |
| TOTAL | 3.261 | 2.420 | 2.284 | 57.334 | 43.492 | 102.850 | 47.826 | 8.017 | 6.886 | 5.880 | 11.889 | 8.061 | TOTAL |
| MEAN | 0.105 | 0.086 | 0.073 | 1.81 | 1.37 | 3.43 | 1.55 | 0.259 | 0.233 | 0.182 | 0.386 | 0.260 | MEAN |
| MAX | 0.128 | 0.103 | 0.103 | 4.01 | 2.81 | 8.78 | 3.42 | 0.423 | 0.488 | 0.363 | 0.458 | 0.387 | MAX |
| MIN | 0.084 | 0.057 | 0.058 | 0.084 | 0.840 | 0.734 | 0.481 | 0.113 | 0.080 | 0.071 | 0.291 | 0.118 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.819
MAXIMUM DAILY, 8.78 ON JUN 20
MINIMUM DAILY, 0.0578 ON FEB 26
MAXIMUM INSTANTANEOUS,
8.97 AT 07:31 CST ON JUN 20

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT. 50 21 28 N
LONG 99 54 00 W

DRAINAGE AREA, 2 630 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 350 | JUL | 4 140 |
| FEB | 208 | AUG | 893 |
| MAR | 198 | SEP | 804 |
| APR | 4 950 | OCT | 515 |
| MAY | 3 870 | NOV | 1 000 |
| JUN | 8 570 | DEC | 696 |

TOTAL DISCHARGE, 25 600 dam³

## LITTLE SASKATCHEWAN RIVER NEAR RIVERS - STATION NO. 05MP018

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.3178 | 0.2418 | 0.2068 | 0.3328 | 3.21 | 1.88 | 4.03 | 0.448 | 3.18 | 0.881 | 0.803 | 0.838 | 1 |
| 2 | 0.3068 | 0.2418 | 0.2088 | 0.3288 | 3.30 | 1.87 | 3.78 | 0.448 | 3.07 | 0.784 | 0.810 | 0.847 | 2 |
| 3 | 0.2948 | 0.2438 | 0.1868 | 0.3108 | 3.08 | 2.14 | 3.64 | 0.447 | 2.98 | 0.708 | 0.851 | 0.834 | 3 |
| 4 | 0.2948 | 0.2448 | 0.2088 | 0.2888 | 3.22 | 2.00 | 3.33 | 0.478 | 2.88 | 0.723 | 0.888 | 0.837 | 4 |
| 5 | 0.2948 | 0.2498 | 0.2098 | 0.2828 | 2.71 | 2.20 | 3.13 | 0.784 | 2.77 | 0.730 | 0.878 | 0.833 | 5 |
| 6 | 0.2448 | 0.2448 | 0.1888 | 0.268 | 2.28 | 2.73 | 2.77 | 0.873 | 2.68 | 0.884 | 0.890 | 0.832 | 6 |
| 7 | 0.2388 | 0.2438 | 0.1888 | 0.268 | 2.31 | 2.43 | 2.33 | 1.08 | 2.58 | 0.870 | 0.898 | 0.828 | 7 |
| 8 | 0.2478 | 0.2358 | 0.2038 | 0.261 | 2.26 | 2.08 | 3.40 | 1.12 | 2.53 | 0.883 | 0.810 | 0.828 | 8 |
| 9 | 0.2378 | 0.2348 | 0.2028 | 0.260 | 2.17 | 2.14 | 3.38 | 1.18 | 2.47 | 0.851 | 0.828 | 0.834 | 9 |
| 10 | 0.2388 | 0.2338 | 0.2048 | 0.264 | 1.90 | 2.24 | 3.01 | 1.17 | 2.40 | 0.828 | 0.843 | 0.8188 | 10 |
| 11 | 0.2348 | 0.2318 | 0.2038 | 0.310 | 1.83 | 2.13 | 2.89 | 1.21 | 1.17 | 0.888 | 0.885 | 0.8068 | 11 |
| 12 | 0.2368 | 0.2378 | 0.2038 | 0.822 | 1.84 | 2.88 | 2.31 | 1.30 | 0.481 | 0.881 | 0.888 | 0.8908 | 12 |
| 13 | 0.2388 | 0.2388 | 0.2068 | 1.88 | 1.42 | 2.18 | 2.08 | 1.48 | 0.418 | 0.880 | 0.874 | 0.8818 | 13 |
| 14 | 0.2388 | 0.2288 | 0.2068 | 2.33 | 1.37 | 1.48 | 1.83 | 1.87 | 0.378 | 0.881 | 0.883 | 0.8858 | 14 |
| 15 | 0.2488 | 0.2278 | 0.2048 | 2.88 | 1.38 | 1.82 | 1.87 | 1.87 | 0.388 | 0.829 | 0.701 | 0.8008 | 15 |
| 16 | 0.2508 | 0.2288 | 0.2048 | 2.87 | 1.43 | 1.48 | 1.48 | 1.23 | 0.413 | 0.828 | 0.708 | 0.8018 | 16 |
| 17 | 0.2478 | 0.2248 | 0.2018 | 3.01 | 1.80 | 2.30 | 1.86 | 1.71 | 0.383 | 0.821 | 0.722 | 0.8978 | 17 |
| 18 | 0.2478 | 0.2228 | 0.2008 | 3.11 | 2.11 | 3.18 | 1.74 | 1.83 | 0.388 | 0.488 | 0.728 | 0.8018 | 18 |
| 19 | 0.2508 | 0.2208 | 0.2028 | 3.21 | 2.01 | 3.38 | 1.82 | 1.38 | 0.388 | 0.488 | 0.738 | 0.8088 | 19 |
| 20 | 0.2508 | 0.2208 | 0.2048 | 3.30 | 1.98 | 4.28 | 1.83 | 1.38 | 0.343 | 0.818 | 0.737 | 0.8088 | 20 |
| 21 | 0.2488 | 0.2208 | 0.2088 | 3.82 | 1.88 | 5.38 | 1.78 | 1.28 | 0.371 | 0.488 | 0.738 | 0.8138 | 21 |
| 22 | 0.2488 | 0.2128 | 0.2118 | 4.08 | 1.83 | 6.08 | 1.32 | 1.13 | 0.410 | 0.477 | 0.714 | 0.8188 | 22 |
| 23 | 0.2628 | 0.2148 | 0.1988 | 3.98 | 1.91 | 6.25 | 1.18 | 0.892 | 0.424 | 0.457 | 0.708 | 0.8128 | 23 |
| 24 | 0.2548 | 0.2168 | 0.2088 | 3.87 | 1.38 | 6.01 | 1.00 | 0.878 | 0.482 | 0.482 | 0.708 | 0.8158 | 24 |
| 25 | 0.2518 | 0.2188 | 0.2078 | 3.85 | 1.28 | 5.47 | 0.938 | 0.887 | 0.488 | 0.478 | 0.700 | 0.8158 | 25 |
| 26 | 0.2448 | 0.2088 | 0.2088 | 3.68 | 1.01 | 4.71 | 0.748 | 0.803 | 0.581 | 0.488 | 0.883 | 0.8158 | 26 |
| 27 | 0.2478 | 0.2078 | 0.2078 | 3.78 | 0.977 | 4.47 | 0.683 | 0.773 | 0.588 | 0.540 | 0.871 | 0.8188 | 27 |
| 28 | 0.2488 | 0.1948 | 0.2288 | 3.85 | 1.28 | 4.37 | 0.617 | 0.738 | 0.810 | 0.882 | 0.848 | 0.8188 | 28 |
| 29 | 0.2488 | | 0.2318 | 3.88 | 0.978 | 4.48 | 0.482 | 2.42 | 0.813 | 0.848 | 0.882 | 0.8188 | 29 |
| 30 | 0.2458 | | 0.2288 | 3.21 | 1.28 | 4.27 | 0.436 | 3.38 | 0.828 | 0.824 | 0.882 | 0.8188 | 30 |
| 31 | 0.2438 | | 0.2488 | | 1.43 | | 0.482 | 3.27 | | 0.812 | | 0.8188 | 31 |
| TOTAL | 7.732 | 6.336 | 6.406 | 83.482 | 68.886 | 97.46 | 81.083 | 39.882 | 37.600 | 17.748 | 18.882 | 18.107 | TOTAL |
| MEAN | 0.248 | 0.226 | 0.207 | 2.12 | 1.83 | 3.35 | 1.87 | 1.28 | 1.25 | 0.872 | 0.855 | 0.818 | MEAN |
| MAX | 0.317 | 0.248 | 0.248 | 4.08 | 3.32 | 8.28 | 4.03 | 3.38 | 3.18 | 0.723 | 0.737 | 0.885 | MAX |
| MIN | 0.234 | 0.194 | 0.188 | 0.260 | 0.977 | 1.48 | 0.438 | 0.448 | 0.343 | 0.487 | 0.803 | 0.880 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 1.18
MAXIMUM DAILY, 6.25 ON JUN 23
MINIMUM DAILY, 0.1868 ON MAR 3
MAXIMUM INSTANTANEOUS,
6.42 AT 17:21 CST ON JUN 23

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 01 36 N
LONG 100 12 54 W
DRAINAGE AREA, 3 810 km²

B - ICE CONDITIONS

REGULATED SINCE 1980

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 888 | JUL | 5 280 |
| FEB | 847 | AUG | 3 430 |
| MAR | 884 | SEP | 3 230 |
| APR | 4 480 | OCT | 1 530 |
| MAY | 4 810 | NOV | 1 700 |
| JUN | 8 420 | DEC | 1 880 |

TOTAL DISCHARGE, 37 400 dam³

## LITTLE SOURIS RIVER NEAR BRANDON - STATION NO. 05MH005

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0 B | 0.3338 | 0.044 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0 B | 4.00 B | 0.038 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0 B | 15.2 B | 0.035 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0 B | 12.8 | 0.032 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0 B | 8.47 | 0.031 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0 B | 4.85 | 0.016 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0 B | 3.38 | 0.010 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0 B | 1.32 | 0.009 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0 B | 0.853 | 0.007 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0 B | 0.378 | 0.004 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0 B | 0.368 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0 B | 0.231 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0 B | 0.278 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0 B | 0.481 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0 B | 0.518 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0 B | 0.418 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0 B | 0.298 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0 B | 0.229 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0 B | 0.241 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0 B | 0.198 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0 B | 0.148 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0 B | 0.134 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0 B | 0.095 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0 B | 0.088 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0 B | 0.084 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0 B | 0.083 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0 B | 0.070 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0.0038 | 0.088 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0.0038 | 0.084 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0.0028 | 0.041 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0.0018 | | 0 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0.009 | 89.098 | 0.320 | 0 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 1.84 | 0.007 | 0 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0.003 | 15.2 | 0.044 | 0 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.041 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.226
MAXIMUM DAILY, 15.28 ON APR 3
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
18.78 AT 15:48 CST ON APR 3

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 43 58 N
LONG 99 50 52 W
DRAINAGE AREA, 451 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 0.78 | SEP | 0 |
| APR | 4 780 | OCT | 0 |
| MAY | 18.0 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, 4 780 dam³

## LONG LAKE NEAR LITTLE GRAND RAPIDS - STATION NO. 05RD010

### DAILY WATER LEVEL IN METRES FOR 1969

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 28.406 | 28.478A | 28.488A | 28.431 | 28.539 | 28.683 | 29.284 | 29.314 | 29.285 | 29.040 | 28.682 | 28.768 | 1 |
| 2 | 28.410A | 28.478A | 28.488A | 28.428 | 28.545 | 28.686 | 29.286 | 29.316 | 29.276 | 29.035 | 28.673 | 28.765 | 2 |
| 3 | 28.411 | 28.478A | 28.488A | 28.424 | 28.547 | 28.682 | 29.301 | 29.348 | 29.261 | 29.026 | 28.671 | 28.762 | 3 |
| 4 | 28.416 | 28.480 | 28.484 | 28.425 | 28.543 | 28.681 | 29.316 | 29.348 | 29.248 | 29.022 | 28.670 | 28.763 | 4 |
| 5 | 28.418 | 28.482 | 28.481 | 28.424 | 28.542 | 28.678 | 29.326 | 29.347 | 29.235 | 29.017 | 28.664 | 28.756 | 5 |
| 6 | 28.418 | 28.485 | 28.481 | 28.423 | 28.546 | 28.673 | 29.327 | 29.348 | 29.221 | 29.010 | 28.658 | 28.745 | 6 |
| 7 | 28.418 | 28.487 | 28.483 | 28.418 | 28.547 | 28.681 | 29.332 | 29.344 | 29.212 | 29.005 | 28.657 | 28.738 | 7 |
| 8 | 28.421A | 28.487 | 28.482 | 28.418 | 28.543 | 28.683 | 29.336 | 29.350 | 29.210 | 28.998 | 28.659 | 28.738 | 8 |
| 9 | 28.428A | 28.490 | 28.480 | 28.418 | 28.536 | 28.682 | 29.338 | 29.350 | 29.203 | 28.995 | 28.656 | 28.735 | 9 |
| 10 | 28.433E | 28.492 | 28.481 | 28.413 | 28.537 | 28.682 | 29.341 | 29.344 | 29.186 | 28.992 | 28.652 | 28.727 | 10 |
| 11 | 28.440E | 28.492 | 28.476 | 28.412 | 28.530 | 28.678 | 29.341 | 29.338 | 29.182 | 28.987 | 28.648 | 28.720A | 11 |
| 12 | 28.445A | 28.495 | 28.470 | 28.410 | 28.524 | 28.683 | 29.342 | 29.329 | 29.167 | 28.984 | 28.648 | 28.718A | 12 |
| 13 | 28.449 | 28.493 | 28.469 | 28.409 | 28.517 | 28.682 | 29.341 | 29.318 | 29.164 | 28.980 | 28.648 | 28.698A | 13 |
| 14 | 28.450 | 28.491A | 28.465 | 28.406 | 28.513 | 28.686 | 29.341 | 29.308 | 29.160 | 28.977 | 28.643 | 28.694 | 14 |
| 15 | 28.452 | 28.488A | 28.464A | 28.406 | 28.504 | 28.682 | 29.346 | 29.301 | 29.177 | 28.972 | 28.636 | 28.693 | 15 |
| 16 | 28.454 | 28.488A | 28.460 | 28.406 | 28.503 | 28.668 | 29.356 | 29.295 | 29.170 | 28.967 | 28.634 | 28.686 | 16 |
| 17 | 28.456 | 28.488A | 28.457 | 28.410 | 28.505 | 28.675 | 29.354 | 29.286 | 29.167 | 28.961 | 28.631 | 28.679A | 17 |
| 18 | 28.461 | 28.490 | 28.457A | 28.407 | 28.540 | 28.683 | 29.359 | 29.278 | 29.155 | 28.953 | 28.624 | 28.673A | 18 |
| 19 | 28.464 | 28.491 | 28.454 | 28.404 | 28.551 | 28.914 | 29.358 | 29.275 | 29.149 | 28.948 | 28.625 | 28.669A | 19 |
| 20 | 28.466 | 28.488 | 28.451 | 28.406 | 28.572 | 28.924 | 29.359 | 29.275 | 29.143 | 28.940 | 28.618 | 28.668A | 20 |
| 21 | 28.472 | 28.488 | 28.448 | 28.415 | 28.584 | 28.938 | 29.358 | 29.283 | 29.133 | 28.936 | 28.614 | 28.663 | 21 |
| 22 | 28.476 | 28.488A | 28.447 | 28.431 | 28.583 | 28.982 | 29.355 | 29.311 | 29.116 | 28.929 | 28.609 | 28.660 | 22 |
| 23 | 28.473 | 28.486 | 28.447 | 28.446 | 28.579 | 28.985 | 29.349 | 29.342 | 29.111 | 28.922 | 28.602 | 28.663 | 23 |
| 24 | 28.474 | 28.488 | 28.446 | 28.462 | 28.578 | 29.013 | 29.349 | 29.358 | 29.103 | 28.917 | 28.602 | 28.664 | 24 |
| 25 | 28.478 | 28.490 | 28.447 | 28.473 | 28.623 | 29.042 | 29.357 | 29.368 | 29.095 | 28.912 | 28.798 | 28.662 | 25 |
| 26 | 28.481 | 28.486 | 28.444 | 28.485 | 28.726 | 29.076 | 29.348 | 29.371 | 29.086 | 28.906 | 28.790 | 28.658 | 26 |
| 27 | 28.484 | 28.488A | 28.438 | 28.489 | 28.780 | 29.130 | 29.340 | 29.383 | 29.083 | 28.906 | 28.785 | 28.655 | 27 |
| 28 | 28.486 | 28.486 | 28.434 | 28.512 | 28.811 | 29.167 | 29.334 | 29.353 | 29.066 | 28.903 | 28.780 | 28.651 | 28 |
| 29 | 28.485 | | 28.434 | 28.519 | 28.840 | 29.204 | 29.335 | 29.348 | 29.060 | 28.900 | 28.780 | 28.648 | 29 |
| 30 | 28.485 | | 28.433 | 28.529 | 28.881 | 29.239 | 29.318 | 29.329 | 29.057 | 28.896 | 28.773 | 28.650 | 30 |
| 31 | 28.481 | | 28.432 | | 28.874 | | 29.314 | 29.311 | | 28.891 | | 28.647 | 31 |
| MEAN | 28.451 | 28.486 | 28.461 | 28.436 | 28.598 | 28.937 | 29.338 | 29.328 | 29.186 | 28.962 | 28.631 | 28.697 | MEAN |
| MAX | 28.485 | 28.495 | 28.486 | 28.529 | 28.874 | 29.239 | 29.359 | 29.371 | 29.286 | 29.040 | 28.682 | 28.768 | MAX |
| MIN | 28.406 | 28.478 | 28.432 | 28.404 | 28.503 | 28.819 | 29.286 | 29.275 | 29.057 | 28.891 | 28.773 | 28.647 | MIN |

SUMMARY FOR THE YEAR 1969

WATER LEVELS IN METRES

MEAN, 28.610
MAXIMUM DAILY, 29.371 ON AUG 26
MINIMUM DAILY, 28.404 ON APR 19
MAXIMUM INSTANTANEOUS,
29.373 AT 08:26 CST ON AUG 26

WATER LEVELS ARE REFERRED TO ASSUMED DATUM

TYPE OF GAUGE - RECORDING
LOCATION - LAT 53 11 30 N
LONG 98 08 20 W

A - MANUAL GAUGE
E - ESTIMATED
NATURAL FLOW

## LONG RIVER NEAR HOLMFIELD - STATION NO. 05BA005

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1969

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0 B | 0.920B | 0.048 | 0.008 | 0.003 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0 B | 2.80 B | 0.041 | 0.009 | 0.003 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0 B | 10.1 B | 0.040 | 0.008 | 0.002 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0 B | 9.20 B | 0.037 | 0.006 | 0.001 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0 B | 8.55 B | 0.027 | 0.006 | 0.001 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0 B | 2.73 B | 0.022 | 0.009 | 0.001 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0 B | 1.65 B | 0.018 | 0.012 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0 B | 1.22 B | 0.017 | 0.011 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0 B | 0.784B | 0.017 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0 B | 0.480A | 0.020 | 0.006 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0 B | 0.417 | 0.015 | 0.005 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0 B | 0.268 | 0.012 | 0.016 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0 B | 0.251 | 0.012 | 0.041 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0 B | 0.256 | 0.012 | 0.058 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0 B | 0.210 | 0.008 | 0.033 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0 B | 0.263 | 0.888 | 0.017 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0 B | 0.267 | 0.030 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0 B | 0.158 | 0.042 | 0.007 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0 B | 0.109 | 0.833 | 0.005 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0 B | 0.088 | 0.020 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0 B | 0.074 | 0.018 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0 B | 0.081 | 0.012 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0 B | 0.132 | 0.010 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0 B | 0.092 | 0.013 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0 B | 0.070 | 0.018 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0 B | 0.056 | 0.024 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0.040B | 0.065 | 0.017 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 2.15 B | 0.068 | 0.015 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 2.84 B | 0.068 | 0.009 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 2.30 B | 0.081 | 0.007 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 1.86 B | | 0.007 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 8.360 | 38.853 | 0.828 | 0.296 | 0.011 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.302 | 1.30 | 0.020 | 0.010 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 2.84 | 10.1 | 0.848 | 0.058 | 0.003 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.056 | 0.007 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.201
MAXIMUM DAILY, 10.1B ON APR 3
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
14.4B AT 17:59 CST ON APR 3

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 06 51 N
LONG 98 24 51 W
DRAINAGE AREA, 577 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

REGULATED SINCE 1966

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0.85 |
| FEB | --- | AUG | 0 |
| MAR | 809 | SEP | 0 |
| APR | 3 360 | OCT | 0 |
| MAY | 84.3 | NOV | --- |
| JUN | 25.6 | DEC | --- |

TOTAL DISCHARGE, 4 260 dam³

## MAIN DRAIN NEAR DOMINION CITY - STATION NO. 05OD026

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.08 | 0 B | 0.086 | 0 | 0 | 0 | 0.001 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0.08 | 0 B | 0.081 | 0 | 0 | 0 | 0.001 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0.08 | 0 B | 0.041 | 0 | 0 | 0 | 0.001 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0.08 | 0 B | 0.030 | 0 | 0 | 0 | 0.001 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0.09 | 0 B | 0.028 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0.08 | 0 B | 0.014 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0.08 | 0 B | 0.010 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0.08 | 0 B | 0.007 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0.08 | 0 B | 0.005 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0.08 | 0 B | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0.08 | 0 B | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0.08 | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0.08 | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0.08 | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0.08 | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0.08 | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0.08 | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0.08 | 0.0019 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0.08 | 0.0258 | 0 | 0 | 0 | 0.038 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0.08 | 1.13 B | 0 | 0 | 0 | 0.138 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0.08 | 5.59 B | 0 | 0 | 0 | 0.160 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0.08 | 22.5 B | 0 | 0 | 0 | 0.081 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0.08 | 12.5 | 0 | 0 | 0 | 0.042 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0.08 | 4.80 | 0 | 0 | 0 | 0.013 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0.08 | 2.78 | 0 | 0 | 0 | 0.008 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0.08 | 1.52 | 0 | 0 | 0 | 0.005 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0.08 | 0.581 | 0 | 0 | 0 | 0.004 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0.08 | 0.382 | 0 | 0 | 0 | 0.003 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0.08 | 0.219 | 0 | 0 | 0 | 0.002 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0.08 | 0.163 | 0 | 0 | 0 | 0.002 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0.08 | | 0 | | 0 | 0.001 | | 0 | --- | --- | 31 |
| TOTAL | --- | --- | 0 | 52.011 | 0.287 | 0 | 0 | 0.505 | 0.004 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 1.73 | 0.009 | 0 | 0 | 0.016 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 22.5 | 0.086 | 0 | 0 | 0.160 | 0.001 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.216
MAXIMUM DAILY, 22.50 ON APR 22
MINIMUM DAILY, 0.08 ON MAR 1
MAXIMUM INSTANTANEOUS,
31.0 AT 17:22 CST ON APR 22

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 03 01 N
LONG 97 08 42 W
DRAINAGE AREA, 236 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 43.5 |
| MAR | 0 | SEP | 0.35 |
| APR | 490 | OCT | 0 |
| MAY | 24.8 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, 4 560 dam³

## MANIGOTAGAN RIVER NEAR MANIGOTAGAN - STATION NO. 05RA001

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.310 | 1.408 | 1.98 | 1.64 | 4.83 | 18.8 | 20.3 | 7.52 | 3.65 | 2.72 | 3.32 | 3.00 | 1 |
| 2 | 1.300 | 1.378 | 1.91 | 1.67 | 4.62 | 18.5 | 19.7 | 7.33 | 3.55 | 2.70 | 3.25 | 2.98 | 2 |
| 3 | 1.288 | 1.288 | 1.83 | 1.70 | 4.49 | 18.5 | 19.0 | 7.43 | 3.50 | 2.70 | 3.17 | 2.91 | 3 |
| 4 | 1.268 | 1.348 | 1.82 | 1.74 | 4.28 | 18.8 | 18.5 | 7.16 | 3.50 | 2.71 | 3.17 | 2.82 | 4 |
| 5 | 1.258 | 1.398 | 1.84 | 1.78 | 4.24 | 18.6 | 18.3 | 6.78 | 3.42 | 2.68 | 3.18 | 2.84 | 5 |
| 6 | 1.308 | 1.498 | 1.92 | 1.79 | 4.47 | 18.8 | 17.8 | 6.48 | 3.70 | 2.67 | 3.17 | 2.84 | 6 |
| 7 | 1.298 | 1.74 | 1.81 | 1.77 | 4.65 | 19.0 | 17.3 | 6.31 | 4.38 | 2.72 | 3.24 | 2.78 | 7 |
| 8 | 1.268 | 1.80 | 1.86 | 1.73 | 4.76 | 19.0 | 16.8 | 6.10 | 3.68 | 2.86 | 3.58 | 2.80 | 8 |
| 9 | 1.198 | 1.81 | 1.94 | 1.72 | 4.86 | 18.8 | 16.4 | 5.85 | 3.69 | 2.86 | 3.67 | 2.97 | 9 |
| 10 | 1.118 | 1.81 | 2.04 | 1.68 | 4.57 | 18.7 | 15.8 | 5.61 | 3.59 | 2.86 | 3.70 | 2.98 | 10 |
| 11 | 1.098 | 1.80 | 2.22 | 1.68 | 4.68 | 19.7 | 15.3 | 5.28 | 3.48 | 2.87 | 3.68 | 2.85 | 11 |
| 12 | 1.168 | 1.78 | 1.94 | 1.68 | 4.72 | 22.5 | 15.0 | 5.20 | 3.44 | 2.81 | 3.65 | 2.85 | 12 |
| 13 | 1.468 | 1.76 | 1.86 | 1.65 | 4.74 | 27.3 | 14.6 | 4.90 | 3.35 | 2.45 | 3.68 | 2.85 | 13 |
| 14 | 1.528 | 1.75 | 1.78 | 1.65 | 4.85 | 25.9 | 14.2 | 4.65 | 3.29 | 2.59 | 3.66 | 2.788 | 14 |
| 15 | 1.818 | 1.71 | 1.73 | 1.71 | 4.60 | 23.8 | 13.8 | 4.69 | 3.26 | 2.79 | 3.57 | 2.818 | 15 |
| 16 | 1.548 | 1.48 | 1.68 | 1.78 | 4.52 | 22.4 | 13.5 | 4.46 | 3.21 | 2.80 | 3.50 | 2.818 | 16 |
| 17 | 1.478 | 1.43 | 1.67 | 1.86 | 4.52 | 21.1 | 13.1 | 4.38 | 3.20 | 2.84 | 3.43 | 2.958 | 17 |
| 18 | 1.488 | 1.37 | 1.67 | 1.87 | 4.84 | 20.7 | 12.7 | 4.52 | 3.15 | 3.16 | 3.35 | 2.768 | 18 |
| 19 | 1.498 | 1.37 | 1.68 | 1.80 | 5.02 | 20.3 | 12.3 | 4.57 | 3.07 | 3.00 | 3.32 | 2.688 | 19 |
| 20 | 1.528 | 1.39 | 1.77 | 2.01 | 6.24 | 19.8 | 11.9 | 4.71 | 3.04 | 3.09 | 3.33 | 2.728 | 20 |
| 21 | 1.538 | 1.44 | 1.88 | 2.20 | 8.75 | 19.3 | 11.5 | 4.91 | 3.05 | 2.93 | 3.31 | 2.728 | 21 |
| 22 | 1.488 | 1.85 | 1.90 | 2.55 | 8.84 | 19.4 | 11.1 | 4.58 | 2.83 | 3.01 | 3.28 | 2.698 | 22 |
| 23 | 1.478 | 1.85 | 1.82 | 3.38 | 7.10 | 19.6 | 10.7 | 4.44 | 2.87 | 2.87 | 3.22 | 2.698 | 23 |
| 24 | 1.448 | 1.85 | 3.00 | 4.83 | 7.20 | 19.6 | 10.2 | 4.32 | 2.80 | 2.77 | 3.20 | 2.888 | 24 |
| 25 | 1.438 | 1.86 | 2.01 | 5.90 | 10.1 | 19.9 | 9.88 | 4.20 | 2.88 | 2.88 | 3.23 | 2.958 | 25 |
| 26 | 1.448 | 1.78 | 1.97 | 5.88 | 18.8 | 20.5 | 9.48 | 4.12 | 2.90 | 3.08 | 3.18 | 2.888 | 26 |
| 27 | 1.558 | 1.91 | 1.94 | 5.74 | 20.9 | 21.4 | 9.06 | 3.98 | 2.83 | 3.70 | 3.10 | 2.608 | 27 |
| 28 | 1.598 | 2.04 | 1.85 | 5.56 | 20.3 | 22.6 | 8.80 | 3.84 | 2.76 | 3.38 | 3.04 | 2.708 | 28 |
| 29 | 1.548 | | 1.78 | 5.32 | 19.5 | 21.3 | 8.38 | 3.86 | 2.77 | 3.31 | 3.03 | 2.688 | 29 |
| 30 | 1.518 | | 1.74 | 5.18 | 19.0 | 20.8 | 8.27 | 3.90 | 2.76 | 3.31 | 3.06 | 2.638 | 30 |
| 31 | 1.388 | | 1.87 | | 18.8 | | 7.84 | 3.75 | | 3.31 | | 2.598 | 31 |
| TOTAL | 43.34 | 44.91 | 57.81 | 81.58 | 249.82 | 613.9 | 421.38 | 180.81 | 87.91 | 90.55 | 100.24 | 87.17 | TOTAL |
| MEAN | 1.40 | 1.60 | 1.86 | 2.72 | 8.05 | 20.5 | 13.6 | 5.16 | 3.26 | 2.82 | 3.34 | 2.81 | MEAN |
| MAX | 1.82 | 2.04 | 3.22 | 5.90 | 20.9 | 27.3 | 20.3 | 7.52 | 4.38 | 3.70 | 3.70 | 3.00 | MAX |
| MIN | 1.09 | 1.38 | 1.65 | 1.64 | 4.24 | 18.5 | 7.84 | 3.75 | 2.76 | 2.68 | 3.03 | 2.59 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 5.61
MAXIMUM DAILY, 27.3 ON JUN 13
MINIMUM DAILY, 1.088 ON JAN 11
MAXIMUM INSTANTANEOUS,
27.9 AT 14:31 CST ON JUN 13

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 05 54 N
LONG 98 17 00 W
DRAINAGE AREA, 1 830 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 3 740 | JUL | 38 400 |
| FEB | 3 880 | AUG | 13 900 |
| MAR | 4 980 | SEP | 8 480 |
| APR | 7 050 | OCT | 7 820 |
| MAY | 21 680 | NOV | 8 660 |
| JUN | 53 000 | DEC | 7 530 |

TOTAL DISCHARGE, 177 000 dam³

## MANNING CANAL NEAR ILE DES CHENES - STATION NO. 05OE005

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.249 | 0.110 | 2.88 | 0.011 | 0.084 | 0.008 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.198 | 0.098 | 2.44 | 0.012 | 0.071 | 0.008 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0.184 | 0.090 | 0.948 | 0.012 | 0.063 | 0.008 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 0.164 | 0.083 | 0.384 | 0.013 | 0.038 | 0.010 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 B | 0.126 | 0.078 | 0.129 | 0.016 | 0.026 | 0.106 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0 B | 0.181 | 0.077 | 0.083 | 0.033 | 0.020 | 0.181 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0 B | 0.186 | 0.088 | 0.050 | 0.050 | 0.017 | 0.112 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0 B | 0.165 | 0.080 | 0.043 | 0.037 | 0.014 | 0.073 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.0018 | 0.132 | 0.117 | 0.038 | 0.027 | 0.013 | 0.050 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.0808 | 0.133 | 0.112 | 0.032 | 0.023 | 0.012 | 0.045 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.1618 | 0.111 | 0.088 | 0.028 | 0.018 | 0.011 | 0.042 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.2208 | 0.104 | 0.100 | 0.033 | 0.018 | 0.014 | 0.042 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.2348 | 0.132 | 0.230 | 0.034 | 0.017 | 0.018 | 0.044 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.3618 | 0.128 | 0.307 | 0.038 | 0.018 | 0.018 | 0.043 | --- | --- | 14 |
| 15 | --- | --- | 0B | 1.03 B | 0.134 | 0.308 | 0.047 | 0.018 | 0.018 | 0.043 | --- | --- | 15 |
| 16 | --- | --- | 0B | 5.95 B | 0.118 | 0.187 | 0.041 | 0.018 | 0.014 | 0.048 | --- | --- | 16 |
| 17 | --- | --- | 0B | 6.80 B | 0.282 | 0.114 | 0.033 | 0.015 | 0.014 | 0.047 | --- | --- | 17 |
| 18 | --- | --- | 0B | 5.55 B | 0.397 | 0.091 | 0.028 | 0.044 | 0.014 | 0.047 | --- | --- | 18 |
| 19 | --- | --- | 0B | 5.68 B | 0.3448 | 0.078 | 0.024 | 0.228 | 0.013 | 0.048 | --- | --- | 19 |
| 20 | --- | --- | 0B | 4.84 B | 0.4058 | 0.071 | 0.028 | 0.304 | 0.018 | 0.077 | --- | --- | 20 |
| 21 | --- | --- | 0B | 4.10 B | 0.388E | 0.088 | 0.028 | 0.442 | 0.017 | 0.110 | --- | --- | 21 |
| 22 | --- | --- | 0B | 3.78 B | 0.312E | 0.087 | 0.023 | 0.507 | 0.015 | 0.100 | --- | --- | 22 |
| 23 | --- | --- | 0B | 3.62 | 0.279E | 0.087 | 0.018 | 0.298 | 0.014 | 0.088 | --- | --- | 23 |
| 24 | --- | --- | 0B | 3.41 | 0.261E | 0.070 | 0.017 | 0.132 | 0.012 | 0.081 | --- | --- | 24 |
| 25 | --- | --- | 0B | 1.84 | 0.329E | 0.082 | 0.015 | 0.088 | 0.010 | 0.076 | --- | --- | 25 |
| 26 | --- | --- | 0B | 1.10 | 0.218E | 0.133 | 0.014 | 0.057 | 0.010 | 0.073 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.757 | 0.304E | 0.283 | 0.012 | 0.053 | 0.007 | 0.081 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.555 | 0.202E | 0.228 | 0.012 | 0.060 | 0.008 | 0.078 | --- | --- | 28 |
| 29 | --- | | 0B | 0.395 | 0.242A | 0.207 | 0.011 | 0.057 | 0.008 | 0.077 | --- | --- | 29 |
| 30 | --- | | 0B | 0.296 | 0.186 | 1.88 | 0.011 | 0.052 | 0.008 | 0.072 | --- | --- | 30 |
| 31 | --- | | 0B | | 0.128 | | 0.011 | 0.078 | | 0.084A | | --- | 31 |
| TOTAL | --- | --- | 0 | $1.880 | 5.380 | 5.578 | 7.511 | 2.734 | 0.812 | 1.858 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 1.72 | 0.208 | 0.186 | 0.242 | 0.088 | 0.020 | 0.083 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 6.88 | 0.405 | 1.88 | 2.88 | 0.507 | 0.084 | 0.181 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0.104 | 0.087 | 0.011 | 0.011 | 0.007 | 0.008 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

SUMMARY FOR THE MONTHS MAR TO OCT

MEAN, 0.312
MAXIMUM DAILY, 6.88B ON APR 16
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
8.24 AT 08:31 CST ON APR 16

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 37 50 N
LONG 96 54 20 W
DRAINAGE AREA, 498 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 648 |
| FEB | --- | AUG | 238 |
| MAR | 0 | SEP | 82.8 |
| APR | 4 450 | OCT | 188 |
| MAY | 551 | NOV | --- |
| JUN | 482 | DEC | --- |

TOTAL DISCHARGE, 6 880 dam³

## MAPLE LAKE NEAR PIPESTONE - STATION NO. 05MG022

DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | DRY | --- | 430.067 | DRY | DRY | DRY | DRY | DRY | --- | --- | 1 |
| 2 | --- | --- | DRY | --- | 430.080 | DRY | DRY | DRY | DRY | DRY | --- | --- | 2 |
| 3 | --- | --- | DRY | --- | 430.055 | DRY | DRY | DRY | DRY | DRY | --- | --- | 3 |
| 4 | --- | --- | DRY | --- | 430.049 | DRY | DRY | DRY | DRY | DRY | --- | --- | 4 |
| 5 | --- | --- | DRY | --- | 430.041 | DRY | DRY | DRY | DRY | DRY | --- | --- | 5 |
| 6 | --- | --- | DRY | 430.235A | 430.033 | DRY | DRY | DRY | DRY | DRY | --- | --- | 6 |
| 7 | --- | --- | DRY | 430.232 | 430.027 | DRY | DRY | DRY | DRY | DRY | --- | --- | 7 |
| 8 | --- | --- | DRY | 430.227 | 430.020 | DRY | DRY | DRY | DRY | DRY | --- | --- | 8 |
| 9 | --- | --- | DRY | 430.222 | 430.012 | DRY | DRY | DRY | DRY | DRY | --- | --- | 9 |
| 10 | --- | --- | DRY | 430.218 | 429.998 | DRY | DRY | DRY | DRY | DRY | --- | --- | 10 |
| 11 | --- | --- | DRY | 430.214 | 429.982 | DRY | DRY | DRY | DRY | DRY | --- | --- | 11 |
| 12 | --- | --- | DRY | 430.210 | 429.938A | DRY | DRY | DRY | DRY | DRY | --- | --- | 12 |
| 13 | --- | --- | DRY | 430.202 | 429.910E | DRY | DRY | DRY | DRY | DRY | --- | --- | 13 |
| 14 | --- | --- | DRY | 430.193 | 429.900E | DRY | DRY | DRY | DRY | DRY | --- | --- | 14 |
| 15 | --- | --- | DRY | 430.186 | 429.891E | DRY | DRY | DRY | DRY | DRY | --- | --- | 15 |
| 16 | --- | --- | DRY | 430.178 | 429.881A | DRY | DRY | DRY | DRY | DRY | --- | --- | 16 |
| 17 | --- | --- | DRY | 430.168 | 429.927A | DRY | DRY | DRY | DRY | DRY | --- | --- | 17 |
| 18 | --- | --- | DRY | 430.159 | 429.913E | DRY | DRY | DRY | DRY | DRY | --- | --- | 18 |
| 19 | --- | --- | DRY | 430.152 | 429.901E | DRY | DRY | DRY | DRY | DRY | --- | --- | 19 |
| 20 | --- | --- | DRY | 430.144 | 429.888E | DRY | DRY | DRY | DRY | DRY | --- | --- | 20 |
| 21 | --- | --- | DRY | 430.138 | 429.875E | DRY | DRY | DRY | DRY | DRY | --- | --- | 21 |
| 22 | --- | --- | DRY | 430.124 | 429.863E | DRY | DRY | DRY | DRY | DRY | --- | --- | 22 |
| 23 | --- | --- | DRY | 430.114 | 429.856E | DRY | DRY | DRY | DRY | DRY | --- | --- | 23 |
| 24 | --- | --- | DRY | 430.114 | 429.815A | DRY | DRY | DRY | DRY | DRY | --- | --- | 24 |
| 25 | --- | --- | DRY | 430.110 | 429.917E | DRY | DRY | DRY | DRY | DRY | --- | --- | 25 |
| 26 | --- | --- | DRY | 430.103 | 429.905E | DRY | DRY | DRY | DRY | DRY | --- | --- | 26 |
| 27 | --- | --- | DRY | 430.095 | 429.892E | DRY | DRY | DRY | DRY | DRY | --- | --- | 27 |
| 28 | --- | --- | DRY | 430.088 | 429.880E | DRY | DRY | DRY | DRY | DRY | --- | --- | 28 |
| 29 | --- | | DRY | 430.080 | 429.868E | DRY | DRY | DRY | DRY | DRY | --- | --- | 29 |
| 30 | --- | | DRY | 430.073 | 429.858E | DRY | DRY | DRY | DRY | DRY | --- | --- | 30 |
| 31 | --- | | DRY | | 429.843E | | DRY | DRY | | DRY | | --- | 31 |
| MEAN | --- | --- | DRY | --- | 429.940 | DRY | DRY | DRY | DRY | DRY | --- | --- | MEAN |
| MAX | --- | --- | DRY | --- | 430.067 | DRY | DRY | DRY | DRY | DRY | --- | --- | MAX |
| MIN | --- | --- | DRY | --- | 429.843 | DRY | DRY | DRY | DRY | DRY | --- | --- | MIN |

WATER LEVELS IN METRES

SUMMARY FOR THE YEAR 1989

MINIMUM DAILY, DRY ON MAR 1

TYPE OF GAUGE - RECORDING
LOCATION - LAT 48 30 14 N
LONG 100 48 58 W

A - MANUAL GAUGE
E - ESTIMATED
REGULATED SINCE 1989
DRAINAGE AREA,
1 190 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

REMARKS - PREVIOUS YR 1988 PUBLISHED UNDER THE NAME "MAPLE (MARSHY) LAKE NEAR PIPESTONE"

## MARGARET LAKE NEAR OTTER FALLS - STATION NO. 05PF801

DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | --- | 274.680 | 274.888 | 274.618 | 274.282 | --- | 274.187 | --- | 1 |
| 2 | --- | --- | --- | --- | 274.683 | 274.668 | 274.778 | 274.667 | 274.318 | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | --- | 274.638 | 274.777 | 274.628 | --- | --- | --- | --- | 3 |
| 4 | --- | --- | --- | --- | --- | 274.600 | 274.618 | 274.784 | --- | 274.187 | --- | --- | 4 |
| 5 | --- | --- | --- | --- | --- | 274.627 | 274.808 | 274.738 | --- | --- | --- | --- | 5 |
| 6 | --- | --- | --- | --- | --- | 274.630 | 274.681 | 274.688 | --- | --- | --- | --- | 6 |
| 7 | --- | --- | --- | --- | --- | 274.678 | 274.948 | 274.641 | --- | --- | --- | --- | 7 |
| 8 | --- | --- | --- | --- | --- | 274.612 | --- | 274.618 | --- | --- | --- | --- | 8 |
| 9 | --- | --- | --- | --- | --- | 274.631 | 274.885 | 274.633 | --- | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | --- | 274.643 | 274.868 | 274.588 | --- | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | --- | 274.637 | --- | 274.6282 | --- | --- | --- | --- | 11 |
| 12 | --- | --- | --- | --- | --- | 274.684 | --- | 274.484 | --- | --- | --- | --- | 12 |
| 13 | --- | --- | --- | --- | --- | 274.628 | --- | 274.403 | --- | --- | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 274.602 | 274.658 | --- | 274.418 | 274.382 | --- | --- | --- | 14 |
| 15 | --- | --- | --- | --- | --- | 274.671 | --- | 274.428 | --- | --- | --- | --- | 15 |
| 16 | --- | --- | --- | --- | --- | 274.641 | --- | 274.388 | --- | --- | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 274.482 | 274.628 | --- | 274.348 | --- | --- | --- | --- | 17 |
| 18 | --- | --- | --- | --- | 274.438 | 274.586 | --- | 274.380 | --- | --- | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 274.482 | 274.516 | --- | 274.330 | --- | --- | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 274.431 | 274.528 | --- | 274.332 | --- | --- | --- | --- | 20 |
| 21 | --- | --- | --- | --- | 274.471 | 274.552 | --- | 274.434 | --- | --- | --- | --- | 21 |
| 22 | --- | --- | --- | --- | 274.598 | 274.533 | --- | 274.338 | --- | --- | --- | --- | 22 |
| 23 | --- | --- | --- | --- | 274.472 | 274.580 | --- | 274.323 | --- | 274.189 | --- | --- | 23 |
| 24 | --- | --- | --- | --- | 274.538 | 274.601 | --- | 274.374 | --- | --- | --- | --- | 24 |
| 25 | --- | --- | --- | --- | 274.441 | 274.634 | 274.881 | 274.378 | --- | --- | --- | --- | 25 |
| 26 | --- | --- | --- | --- | 274.430 | 274.656 | 274.887 | 274.3872 | --- | --- | --- | --- | 26 |
| 27 | --- | --- | --- | --- | 274.744 | 274.624 | 274.880 | 274.385 | --- | --- | --- | --- | 27 |
| 28 | --- | --- | --- | --- | 274.677 | 274.686 | 274.877 | 274.373 | --- | --- | --- | --- | 28 |
| 29 | --- | | --- | --- | 274.678 | 274.688 | 274.881 | 274.310 | --- | --- | --- | --- | 29 |
| 30 | --- | | --- | --- | 274.678 | 274.687 | 274.826 | 274.313 | --- | --- | --- | --- | 30 |
| 31 | --- | | --- | | 274.688 | | 274.883 | 274.316 | | --- | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | 274.679 | --- | 274.488 | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | 274.871 | --- | 274.887 | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | 274.600 | --- | 274.310 | --- | --- | --- | --- | MIN |

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 50 06 38 N
LONG 95 49 04 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED

DRAINAGE AREA, 127 000 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## MARSH RIVER NEAR OTTERBURNE - STATION NO. 05OE010

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 | B | 4.83 | 0.052 | 0.001 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 | B | 3.38 | 0.038 | 0.001 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 | B | 2.50 | 0.034 | 0.001 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 | B | 1.88 | 0.020 | 0.001 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 | B | 1.48 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0 | B | 1.25 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0 | B | 1.07 | 0.007 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0 | B | 0.888 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0 | B | 0.738 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0 | B | 0.606 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0 | B | 0.520 | 0.005 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0 | B | 0.438 | 0.005 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.0288 | | 0.364 | 0.013 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.1348 | | 0.274 | 0.014 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.4018 | | 0.208 | 0.009 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.6068 | | 0.203 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.4568 | | 0.243 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.6968 | | 0.284 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 2.79 | B | 0.248 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 5.06 | B | 0.231 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 10.9 | B | 0.200 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 21.4 | | 0.178 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 28.8 | | 0.162 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 28.5 | | 0.157 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 28.3 | | 0.148 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 21.5 | | 0.141 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 18.6 | | 0.151 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 14.1 | | 0.128 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 9.80 | | 0.091 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 8.54 | | 0.078 | 0.001 | 0 | 0 | 0 | 0A | --- | --- | 30 |
| 31 | --- | | 0B | | | 0.082 | | 0 | 0 | | 0E | | --- | 31 |
| TOTAL | --- | --- | 0 | 197.814 | | 22.871 | 0.234 | 0.004 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 6.59 | | 0.738 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 28.8 | | 4.83 | 0.052 | 0.001 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | | 0.082 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.801
MAXIMUM DAILY, 28.8 ON APR 23
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
31.1 AT 14:31 CST ON APR 23

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 30 00 N
LONG 97 08 20 W
DRAINAGE AREA, 393 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0.35 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 17 100 | OCT | 0 |
| MAY | 1 980 | NOV | --- |
| JUN | 20.2 | DEC | --- |

TOTAL DISCHARGE, 19 100 dam³

## MARY JANE RESERVOIR NEAR LA RIVIERE - STATION NO. 05OB014

DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 487.555 | 487.547 | 487.521 | 487.517 | 488.512 | 488.430 | 488.388 | 488.215 | 488.111 | 488.033 | 487.953 | 487.930 | 1 |
| 2 | 487.555 | 487.545 | 487.519 | 487.517 | 488.508 | 488.424 | 488.384 | 488.209 | 488.103 | 488.023 | 487.952 | 487.930 | 2 |
| 3 | 487.555 | 487.544 | 487.517 | 487.521 | 488.507 | 488.418 | 488.388 | 488.208 | 488.100 | 488.018 | 487.949 | 487.927 | 3 |
| 4 | 487.553 | 487.542 | 487.518 | 487.528 | 488.506 | 488.411 | 488.384 | 488.208 | 488.097 | 488.018 | 487.952 | 487.928 | 4 |
| 5 | 487.552 | 487.541 | 487.514 | 487.533 | 488.498 | 488.410 | 488.378 | 488.198 | 488.094 | 488.018 | 487.956 | 487.926 | 5 |
| 6 | 487.553 | 487.538 | 487.513 | 487.536 | 488.491 | 488.411 | 488.375 | 488.192 | 488.088 | 488.014 | 487.952 | 487.925 | 6 |
| 7 | 487.552 | 487.540 | 487.511 | 487.545 | 488.488 | 488.427 | 488.388 | 488.188 | 488.082 | 488.012 | 487.953 | 487.923 | 7 |
| 8 | 487.554 | 487.538 | 487.508 | 487.551 | 488.486 | 488.424 | 488.380 | 488.178 | 488.088 | 488.010 | 487.958 | 487.920 | 8 |
| 9 | 487.552 | 487.535 | 487.508 | 487.553 | 488.485 | 488.421 | 488.381 | 488.172 | 488.081 | 488.007 | 487.955 | 487.920 | 9 |
| 10 | 487.550 | 487.534 | 487.507 | 487.552 | 488.483 | 488.417 | 488.380 | 488.185 | 488.078 | 488.005 | 487.952 | 487.920 | 10 |
| 11 | 487.556 | 487.533 | 487.508 | 487.551 | 488.489 | 488.413 | 488.388 | 488.180 | 488.108 | 488.000 | 487.948 | 487.918 | 11 |
| 12 | 487.557 | 487.533 | 487.507 | 487.555 | 488.481 | 488.416 | 488.383 | 488.157 | 488.115 | 487.998 | 487.947 | 487.915 | 12 |
| 13 | 487.554 | 487.531 | 487.508 | 487.578 | 488.475 | 488.440 | 488.344 | 488.153 | 488.112 | 487.994 | 487.947 | 487.915 | 13 |
| 14 | 487.556 | 487.530 | 487.508 | 487.586 | 488.472 | 488.440 | 488.338 | 488.152 | 488.107 | 487.994 | 487.947 | 487.912 | 14 |
| 15 | 487.558 | 487.527 | 487.507 | 488.017 | 488.458 | 488.437 | 488.333 | 488.148 | 488.105 | 487.992 | 487.948 | 487.911 | 15 |
| 16 | 487.557 | 487.526 | 487.507 | 488.488 | 488.455 | 488.434 | 488.328 | 488.142 | 488.100 | 487.988 | 487.948 | 487.911 | 16 |
| 17 | 487.556 | 487.525 | 487.507 | 488.508 | 488.454 | 488.428 | 488.321 | 488.138 | 488.085 | 487.987 | 487.948 | 487.910 | 17 |
| 18 | 487.555 | 487.524 | 487.505 | 488.502 | 488.470 | 488.426 | 488.313 | 488.143 | 488.089 | 487.984 | 487.945 | 487.909 | 18 |
| 19 | 487.555 | 487.522 | 487.505 | 488.582 | 488.488 | 488.420 | 488.307 | 488.153 | 488.085 | 487.978 | 487.942 | 487.907 | 19 |
| 20 | 487.555 | 487.523 | 487.503 | 488.574 | 488.482 | 488.416 | 488.303 | 488.148 | 488.083 | 487.975 | 487.941 | 487.903 | 20 |
| 21 | 487.552 | 487.523 | 487.498 | 488.568 | 488.458 | 488.412 | 488.298 | 488.146 | 488.080 | 487.972 | 487.940 | 487.900 | 21 |
| 22 | 487.551 | 487.524 | 487.496 | 488.572 | 488.455 | 488.406 | 488.283 | 488.145 | 488.075 | 487.968 | 487.940 | 487.898 | 22 |
| 23 | 487.551 | 487.524 | 487.496 | 488.578 | 488.468 | 488.403 | 488.272 | 488.142 | 488.087 | 487.966 | 487.941 | 487.893 | 23 |
| 24 | 487.550 | 487.522 | 487.498 | 488.569 | 488.454 | 488.389 | 488.265 | 488.135 | 488.090 | 487.963 | 487.939 | 487.892 | 24 |
| 25 | 487.549 | 487.526 | 487.499 | 488.552 | 488.453 | 488.389 | 488.259 | 488.132 | 488.088 | 487.964 | 487.938 | 487.892 | 25 |
| 26 | 487.547 | 487.524 | 487.499 | 488.540 | 488.448 | 488.388 | 488.248 | 488.133 | 488.082 | 487.962 | 487.938 | 487.891 | 26 |
| 27 | 487.548 | 487.522 | 487.502 | 488.528 | 488.448 | 488.384 | 488.242 | 488.128 | 488.067 | 487.962 | 487.938 | 487.891 | 27 |
| 28 | 487.548 | 487.522 | 487.501 | 488.523 | 488.447 | 488.380 | 488.235 | 488.125 | 488.062 | 487.958 | 487.934 | 487.890 | 28 |
| 29 | 487.548 | | 487.508 | 488.518 | 488.441 | 488.400 | 488.232 | 488.117 | 488.038 | 487.957 | 487.931 | 487.890 | 29 |
| 30 | 487.547 | | 487.517 | 488.516 | 488.436 | 488.401 | 488.229 | 488.117 | 488.036 | 487.957 | 487.929 | 487.889 | 30 |
| 31 | 487.551 | | 487.517 | | 488.434 | | 488.222 | 488.114 | | 487.956 | | 487.888 | 31 |
| MEAN | 487.554 | 487.531 | 487.507 | 488.088 | 488.472 | 488.415 | 488.318 | 488.157 | 488.084 | 487.988 | 487.945 | 487.908 | MEAN |
| MAX | 487.564 | 487.547 | 487.521 | 488.582 | 488.512 | 488.440 | 488.388 | 488.215 | 488.115 | 488.033 | 487.956 | 487.930 | MAX |
| MIN | 487.548 | 487.522 | 487.498 | 487.517 | 488.434 | 488.380 | 488.222 | 488.114 | 488.036 | 487.956 | 487.929 | 487.888 | MIN |

WATER LEVELS IN METRES

MEAN, 487.986
MAXIMUM DAILY, 488.592 ON APR 18
MINIMUM DAILY, 487.498 ON MAR 22
MAXIMUM INSTANTANEOUS,
488.595 AT 02:48 CST ON APR 18

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 17 14 N
LONG 96 37 27 W

REGULATED

DRAINAGE AREA,
74.1 km²

## MCKINN[illegible] CREEK NEAR MCCREARY - STATION NO. 05LJ027

DAILY D[illegible]CHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.0018 | 0.0888 | 0.185 | 0.023 | 0.044 | 0.038 | 0.042 | 0.032 | --- | --- | 1 |
| 2 | --- | --- | 0.0018 | 0.1888 | 0.137 | 0.033 | 0.038 | 0.037 | 0.038 | 0.037 | --- | --- | 2 |
| 3 | --- | --- | 0.0018 | 0.1888 | 0.127 | 0.036 | 0.035 | 0.041 | 0.034 | 0.044 | --- | --- | 3 |
| 4 | --- | --- | 0.0018 | 0.1818 | 0.131 | 0.038 | 0.033 | 0.042 | 0.048 | 0.051 | --- | --- | 4 |
| 5 | --- | --- | 0.0018 | 0.1708 | 0.182 | 0.052 | 0.030 | 0.037 | 0.037 | 0.051 | --- | --- | 5 |
| 6 | --- | --- | 0.0018 | 0.1448 | 0.120 | 0.088 | 0.031 | 0.033 | 0.081 | 0.047 | --- | --- | 6 |
| 7 | --- | --- | 0.0028 | 0.1088 | 0.108 | 0.222 | 0.032 | 0.033 | 0.118 | 0.043 | --- | --- | 7 |
| 8 | --- | --- | 0.0028 | 0.0718 | 0.104 | 0.178 | 0.184 | 0.027 | 0.088 | 0.042 | --- | --- | 8 |
| 9 | --- | --- | 0.0038 | 0.0888 | 0.104 | 0.134 | 0.118 | 0.032 | 0.048 | 0.043 | --- | --- | 9 |
| 10 | --- | --- | 0.0048 | 0.0778 | 0.078 | 0.087 | 0.088 | 0.017 | 0.042 | 0.043 | --- | --- | 10 |
| 11 | --- | --- | 0.0038 | 0.0878 | 0.088 | 0.072 | 0.053 | 0.013 | 0.038 | 0.036 | --- | --- | 11 |
| 12 | --- | --- | 0.0028 | 0.1138 | 0.132 | 1.07 | 0.078 | 0.010 | 0.048 | 0.033 | --- | --- | 12 |
| 13 | --- | --- | 0.0028 | 0.1938 | 0.058 | 8.72 | 0.088 | 0.009 | 0.023 | 0.033 | --- | --- | 13 |
| 14 | --- | --- | 0.0018 | 0.2488 | 0.042 | 1.73 | 0.083 | 0.057 | 0.023 | 0.038 | --- | --- | 14 |
| 15 | --- | --- | 0.0018 | 0.2818 | 0.040 | 0.877 | 0.047 | 0.038 | 0.023 | 0.088 | --- | --- | 15 |
| 16 | --- | --- | 0.0018 | 0.3778 | 0.042 | 0.344 | 0.048 | 0.028 | 0.024 | 0.055 | --- | --- | 16 |
| 17 | --- | --- | 0.0018 | 0.2888 | 0.058 | 0.247 | 0.048 | 0.028 | 0.020 | 0.052 | --- | --- | 17 |
| 18 | --- | --- | 0.0018 | 0.3608 | 0.081 | 0.218 | 0.040 | 0.023 | 0.018 | 0.047 | --- | --- | 18 |
| 19 | --- | --- | 0.0018 | 0.3608 | 0.084 | 0.150 | 0.039 | 0.030 | 0.020 | 0.042 | --- | --- | 19 |
| 20 | --- | --- | 0.0018 | 0.4128 | 0.088 | 0.107 | 0.038 | 0.088 | 0.038 | 0.038 | --- | --- | 20 |
| 21 | --- | --- | 0.0018 | 0.2888 | 0.077 | 0.088 | 0.037 | 0.068 | 0.027 | 0.040 | --- | --- | 21 |
| 22 | --- | --- | 0.0028 | 0.4608 | 0.072 | 0.082 | 0.035 | 0.042 | 0.027 | 0.044 | --- | --- | 22 |
| 23 | --- | --- | 0.0038 | 0.4088 | 0.074 | 0.072 | 0.033 | 0.030 | 0.038 | 0.037 | --- | --- | 23 |
| 24 | --- | --- | 0.0038 | 0.383 | 0.102 | 0.088 | 0.030 | 0.026 | 0.026 | 0.034 | --- | --- | 24 |
| 25 | --- | --- | 0.0048 | 0.288 | 0.288 | 0.088 | 0.033 | 0.034 | 0.037 | 0.038 | --- | --- | 25 |
| 26 | --- | --- | 0.0058 | 0.228 | 0.801 | 0.083 | 0.028 | 0.043 | 0.032 | 0.040 | --- | --- | 26 |
| 27 | --- | --- | 0.0028 | 0.248 | 0.341 | 0.071 | 0.027 | 0.030 | 0.024 | 0.0488 | --- | --- | 27 |
| 28 | --- | --- | 0.0028 | 0.185 | 0.242 | 0.058 | 0.027 | 0.040 | 0.027 | 0.0488 | --- | --- | 28 |
| 29 | --- | --- | 0.0038 | 0.185 | 0.087 | 0.085 | 0.038 | 0.317 | 0.026 | 0.0388 | --- | --- | 29 |
| 30 | --- | --- | 0.0118 | 0.182 | 0.033 | 0.051 | 0.046 | 0.083 | 0.028 | 0.0328 | --- | --- | 30 |
| 31 | --- | --- | 0.0288 | | 0.018 | | 0.043 | 0.051 | | 0.0288 | | --- | 31 |
| TOTAL | --- | --- | 0.102 | 8.578 | 3.706 | 12.812 | 1.498 | 1.388 | 1.088 | 1.290 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.003 | 0.233 | 0.120 | 0.427 | 0.048 | 0.042 | 0.037 | 0.042 | --- | --- | MEAN |
| MAX | --- | --- | 0.032 | 0.480 | 0.801 | 8.72 | 0.184 | 0.317 | 0.118 | 0.088 | --- | --- | MAX |
| MIN | --- | --- | 0.001 | 0.088 | 0.018 | 0.023 | 0.027 | 0.008 | 0.018 | 0.028 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.118
MAXIMUM DAILY, 8.72 ON JUN 13
MINIMUM DAILY, 0.0018 ON MAR 1
MAXIMUM INSTANTANEOUS,
11.4 AT 03:32 CST ON JUN 13

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 45 00 N
LONG 99 28 45 W
DRAINAGE AREA, 78.2 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 128 |
| FEB | --- | AUG | 111 |
| MAR | 0.61 | SEP | 94.7 |
| APR | 577 | OCT | 111 |
| MAY | 330 | NOV | --- |
| JUN | 1 110 | DEC | --- |

TOTAL DISCHARGE, 2 480 dam³

## MEDORA CREEK NEAR NAPINKA - STATION NO. 05NE020

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0 B | 4.08 B | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0 B | 7.85 B | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0 B | 4.76 B | 0.007 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0 B | 3.52 B | 0.006 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0 B | 3.13 | 0.005 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0 B | 3.01 | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0 B | 1.38 | 0.004 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0 B | 0.645 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0 B | 0.324 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0 B | 0.317 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0 B | 0.220 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0 B | 0.188 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0 B | 0.131 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0 B | 0.143 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0 B | 0.114 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0 B | 0.083 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0 B | 0.064 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0 B | 0.040 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0 B | 0.025 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0 B | 0.023 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0 B | 0.014 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0 B | 0.013 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0 B | 0.013 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0 B | 0.012 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0 B | 0.014 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0 B | 0.014 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0 B | 0.013 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0 B | 0.012 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 1.00 B | 0.010 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 1.70 B | 0.010 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 1.82 B | | 0 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 4.33 | 38.988 | 0.063 | 0 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.139 | 0.988 | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 1.70 | 7.85 | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.010 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.136
MAXIMUM DAILY, 7.850 ON APR 2
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
10.10 AT 18:46 CST ON APR 2

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 19 30 N
LONG 100 42 10 W
DRAINAGE AREA, 317 $km^2$

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 373 | SEP | 0 |
| APR | 2 500 | OCT | 0 |
| MAY | 4.58 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, 2 880 $dam^3$

## METIGOSHE LAKE NEAR METIGOSHE - STATION NO. 05NF804

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 851.218E | 851.333 | 851.383 | 851.118E | 850.988 | 850.928 | 850.678E | --- | 1 |
| 2 | --- | --- | --- | --- | 851.218 | 851.327E | 851.357E | 851.118 | 851.008E | 850.938E | 850.878 | --- | 2 |
| 3 | --- | --- | --- | --- | 851.218E | 851.322 | 851.282 | 851.128 | 851.018 | 850.928 | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 851.218 | 851.322E | 851.247E | 851.104 | 851.014E | 850.928E | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 851.218E | 851.332 | 851.342 | 851.084E | 851.009 | 850.928 | --- | --- | 5 |
| 6 | --- | --- | --- | --- | 851.218 | 851.317E | 851.337E | 851.084 | 851.003E | 850.931E | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 851.228E | 851.312 | 851.332 | 851.080E | 850.998 | 850.918 | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 851.238 | 851.312E | 851.327E | 851.078 | 851.001E | 850.914E | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 851.257E | 851.312 | 851.332 | 851.070E | 851.006 | 850.911E | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 851.237 | 851.307E | 851.218E | 851.085 | 851.001E | 850.908E | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 851.235E | 851.302 | 851.213 | 851.085E | 850.988 | 850.908E | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 851.232 | 851.317E | 851.207E | 851.085 | 850.991E | 850.904E | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 851.227E | 851.332 | 851.201 | 851.080E | 850.988 | 850.901E | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 851.222 | 851.337E | 851.202E | 851.088 | 850.991E | 850.898E | --- | --- | 14 |
| 15 | --- | --- | --- | --- | 851.217E | 851.342 | 851.202 | 851.091E | 850.978 | 850.898 | --- | --- | 15 |
| 16 | --- | --- | --- | --- | 851.213 | 851.342E | 851.197E | 851.088 | 850.988E | 850.888E | --- | --- | 16 |
| 17 | --- | --- | --- | 851.188 | 851.232E | 851.342 | 851.192 | 851.088E | 850.998 | 850.898 | --- | --- | 17 |
| 18 | --- | --- | --- | 851.201E | 851.282 | 851.337E | 851.187E | 851.088 | 850.991E | 850.891E | --- | --- | 18 |
| 19 | --- | --- | --- | 851.208 | 851.257E | 851.332 | 851.182 | 851.081E | 850.988 | 850.888 | --- | --- | 19 |
| 20 | --- | --- | --- | 851.208E | 851.262 | 851.332E | 851.177E | 851.078 | 850.991E | 850.888E | --- | --- | 20 |
| 21 | --- | --- | --- | 851.208 | 851.262E | 851.332 | 851.173 | 851.081E | 850.978 | 850.888 | --- | --- | 21 |
| 22 | --- | --- | --- | 851.208E | 851.242 | 851.327E | 851.182E | 851.078 | 850.971E | 850.888E | --- | --- | 22 |
| 23 | --- | 851.188 | --- | 851.208 | 851.242E | 851.322 | 851.183 | 851.032E | 850.988 | 850.888 | --- | --- | 23 |
| 24 | --- | --- | --- | 851.211E | 851.242 | 851.332E | 851.146E | 851.017 | 850.991E | 850.888E | --- | --- | 24 |
| 25 | --- | --- | --- | 851.218 | 851.247E | 851.332 | 851.143 | 851.032E | 850.988 | 850.888 | --- | --- | 25 |
| 26 | --- | --- | --- | 851.218E | 851.262 | 851.317E | 851.138E | 851.027 | 850.991E | 850.888E | --- | --- | 26 |
| 27 | --- | --- | --- | 851.218 | 851.247E | 851.312 | 851.133 | 851.017E | 850.988 | 850.888 | --- | --- | 27 |
| 28 | --- | --- | --- | 851.218E | 851.242 | 851.327E | 851.133E | 851.007 | 850.981E | 850.881E | --- | --- | 28 |
| 29 | --- | | --- | 851.218 | 851.237E | 851.262 | 851.133 | 851.007E | 850.938 | 850.878 | --- | --- | 29 |
| 30 | --- | | --- | 851.218 | 851.232 | 851.262E | 851.128E | 851.007 | 850.991E | 850.878E | --- | --- | 30 |
| 31 | --- | | --- | | 851.232E | | 851.124 | 851.003E | | 850.878 | | --- | 31 |
| MEAN | --- | --- | --- | --- | 851.224 | 851.327 | 851.181 | 851.083 | 850.982 | 850.898 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 851.262 | 851.342 | 851.342 | 851.128 | 851.018 | 850.928 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 851.218 | 851.303 | 851.124 | 851.003 | 850.931 | 850.878 | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 00 08 N
LONG 100 21 58 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED

DRAINAGE AREA,
174 $km^2$

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## MINK CREEK NEAR ETHELBERT - STATION NO. 05LJ018

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0 | B | 0.3828 | 0.071 | 0.088 | 0.078 | 0 | 0.104 | 0.048 | --- | --- | 1 |
| 2 | --- | --- | 0 | B | 0.6018 | 0.071 | 0.083 | 0.088 | 0.002 | 0.077 | 0.043 | --- | --- | 2 |
| 3 | --- | --- | 0 | B | 0.5548 | 0.074 | 0.087 | 0.084 | 0.088 | 0.085 | 0.047 | --- | --- | 3 |
| 4 | --- | --- | 0 | B | 0.4508 | 0.088 | 0.077 | 0.081 | 0.208 | 0.128 | 0.044 | --- | --- | 4 |
| 5 | --- | --- | 0 | B | 0.4158 | 0.120 | 0.088 | 0.048 | 0.088 | 0.130 | 0.047 | --- | --- | 5 |
| 6 | --- | --- | 0 | B | 0.4048 | 0.138 | 0.120 | 0.041 | 0.088 | 0.088 | 0.044 | --- | --- | 6 |
| 7 | --- | --- | 0 | B | 0.3928 | 0.080 | 0.320 | 0.038 | 0.087 | 0.074 | 0.039 | --- | --- | 7 |
| 8 | --- | --- | 0 | B | 0.3808 | 0.083 | 0.307 | 0.084 | 0.038 | 0.088 | 0.042 | --- | --- | 8 |
| 9 | --- | --- | 0 | B | 0.3658 | 0.083 | 0.268 | 0.181 | 0.013 | 0.181 | 0.048 | --- | --- | 9 |
| 10 | --- | --- | 0 | B | 0.2908 | 0.088 | 0.254 | 0.184 | 0.005 | 0.088 | 0.047 | --- | --- | 10 |
| 11 | --- | --- | 0 | B | 0.2188 | 0.070 | 0.438 | 0.132 | 0.002 | 0.047 | 0.084 | --- | --- | 11 |
| 12 | --- | --- | 0 | B | 0.2088 | 0.083 | 1.41 | 0.128 | 0.038 | 0.038 | 0.031 | --- | --- | 12 |
| 13 | --- | --- | 0 | B | 0.1338 | 0.083 | 2.73 | 0.088 | 0.288 | 0.048 | 0.088 | --- | --- | 13 |
| 14 | --- | --- | 0 | B | 0.1338 | 0.083 | 2.87 | 0.081 | 0.133 | 0.047 | 0.050 | --- | --- | 14 |
| 15 | --- | --- | 0 | B | 0.1208 | 0.088 | 1.84 | 0.048 | 0.078 | 0.040 | 0.073 | --- | --- | 15 |
| 16 | --- | --- | 0 | B | 0.1288 | 0.088 | 0.980 | 0.037 | 0.083 | 0.041 | 0.081 | --- | --- | 16 |
| 17 | --- | --- | 0 | B | 0.1808 | 0.088 | 0.588 | 0.031 | 0.084 | 0.037 | 0.073 | --- | --- | 17 |
| 18 | --- | --- | 0 | B | 0.1788 | 0.080 | 0.504 | 0.028 | 1.28 | 0.031 | 0.088 | --- | --- | 18 |
| 19 | --- | --- | 0 | B | 0.1828 | 0.083 | 0.278 | 0.024 | 0.807 | 0.034 | 0.082 | --- | --- | 19 |
| 20 | --- | --- | 0 | B | 0.1388 | 0.086 | 0.253 | 0.018 | 0.281 | 0.088 | 0.083 | --- | --- | 20 |
| 21 | --- | --- | 0 | B | 0.1888 | 0.103 | 0.121 | 0.014 | 0.131 | 0.048 | 0.081 | --- | --- | 21 |
| 22 | --- | --- | 0 | B | 0.1778 | 0.082 | 0.109 | 0.004 | 0.073 | 0.047 | 0.080 | --- | --- | 22 |
| 23 | --- | --- | 0 | B | 0.2088 | 0.088 | 0.082 | 0.002 | 0.087 | 0.088 | 0.054 | --- | --- | 23 |
| 24 | --- | --- | 0.0028 | | 0.284 | 0.088 | 0.070 | 0.002 | 0.080 | 0.048 | 0.048 | --- | --- | 24 |
| 25 | --- | --- | 0.0088 | | 0.121 | 0.322 | 0.072 | 0.003 | 0.221 | 0.034 | 0.088 | --- | --- | 25 |
| 26 | --- | --- | 0.0083 | | 0.137 | 0.241 | 0.167 | 0 | 0.133 | 0.028 | 0.048 | --- | --- | 26 |
| 27 | --- | --- | 0.0028 | | 0.130 | 0.218 | 0.188 | 0 | 0.088 | 0.030 | 0.173 | --- | --- | 27 |
| 28 | --- | --- | 0.0018 | | 0.093 | 0.237 | 0.181 | 0.005 | 0.110 | 0.025 | 0.338 | --- | --- | 28 |
| 29 | --- | | 0.0018 | | 0.075 | 0.248 | 0.153 | 0.004 | 0.321 | 0.044 | 0.260 | --- | --- | 29 |
| 30 | --- | | 0.0158 | | 0.052 | 0.111 | 0.103 | 0.002 | 0.210 | 0.053 | 0.229 | --- | --- | 30 |
| 31 | --- | | 0.1088 | | | 0.101 | | 0.001 | 0.141 | | 0.253 | | --- | 31 |
| TOTAL | --- | --- | 0.163 | | 7.280 | 3.258 | 14.412 | 1.418 | 4.849 | 1.838 | 2.838 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.005 | | 0.243 | 0.105 | 0.480 | 0.048 | 0.158 | 0.061 | 0.085 | --- | --- | MEAN |
| MAX | --- | --- | 0.108 | | 0.601 | 0.322 | 3.73 | 0.181 | 1.28 | 0.181 | 0.338 | --- | --- | MAX |
| MIN | --- | --- | 0 | | 0.075 | 0.052 | 0.070 | 0 | 0 | 0.025 | 0.031 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.146
MAXIMUM DAILY, 3.73 ON JUN 13
MINIMUM DAILY, 0.0 ON MAR 1
MAXIMUM INSTANTANEOUS,
3.13 AT 18:28 CST ON JUN 13

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 25 00 N
LONG 100 21 10 W
DRAINAGE AREA, 131 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 123 |
| FEB | --- | AUG | 419 |
| MAR | 12.4 | SEP | 159 |
| APR | 629 | OCT | 227 |
| MAY | 281 | NOV | --- |
| JUN | 1 250 | DEC | --- |

TOTAL DISCHARGE, 3 100 dam³

## MINNEWASTA CREEK NEAR BEULAH - STATION NO. 05ME006

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0.008B | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | 0B | 0.018B | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | 0B | 0.031E | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | 0B | 0.057E | 0.002 | 0 | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | 0B | 0.084A | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | 0B | 0.185 | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.204 | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.113 | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.080 | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.038 | 0 | 0 | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.038 | 0 | 0 | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.031 | 0 | 0 | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.020 | 0 | 0 | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.015 | 0 | 0 | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.011 | 0 | 0 | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.008 | 0 | 0 | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.006 | 0 | 0 | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.004 | 0 | 0 | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.003 | 0 | 0 | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.002 | 0 | 0 | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.002 | 0 | 0 | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.002 | 0 | 0 | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.001 | 0 | 0 | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.003 | 0.003 | 0 | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.002 | 0.003 | 0 | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.001 | 0.002 | 0 | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.001 | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.001 | 0 | 0 | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | 0B | 0.001 | 0 | 0 | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | 0B | 0.001 | 0 | 0 | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | --- | --- | --- | --- | --- | --- | 31 |
| TOTAL | --- | --- | 0 | 0.838 | 0.018 | 0 | --- | --- | --- | --- | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.031 | 0.001 | 0 | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.204 | 0.003 | 0 | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.001 | 0 | 0 | --- | --- | --- | --- | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.008
MAXIMUM DAILY, 0.204 ON APR 7
MINIMUM DAILY, 0.0 ON MAR 1
MAXIMUM INSTANTANEOUS,
0.352 AT 16:45 CST ON APR 6

SUMMARY FOR THE MONTHS MAR TO JUN

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 16 30 N
LONG 101 00 55 W
DRAINAGE AREA, 382 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | --- |
| FEB | --- | AUG | --- |
| MAR | 0 | SEP | --- |
| APR | 81.0 | OCT | --- |
| MAY | 1.84 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, 82.8 dam³

## MOOSE LAKE NEAR SPRAGUE - STATION NO. 05PB802

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | --- | 346.888E | --- | 346.935 | 346.878 | --- | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 346.839 | 346.889 | --- | 346.918E | 346.878E | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | --- | 346.888E | 346.904 | 346.912E | 346.878E | --- | --- | --- | 3 |
| 4 | --- | --- | --- | --- | --- | 346.888 | 346.905 | 346.905 | 346.878E | --- | --- | --- | 4 |
| 5 | --- | --- | --- | --- | --- | 346.888E | 346.912E | 346.900E | 346.878 | --- | --- | --- | 5 |
| 6 | --- | --- | --- | --- | --- | 346.888 | 346.918E | 346.885 | 346.873E | --- | --- | --- | 6 |
| 7 | --- | --- | --- | --- | --- | 346.888E | 346.924 | 346.888E | 346.888E | --- | --- | --- | 7 |
| 8 | --- | --- | --- | --- | --- | 346.888E | 346.924E | 346.885 | 346.888 | --- | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 346.804 | 346.888 | 346.924 | 346.888E | 346.888E | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | --- | 346.858E | 346.930E | 346.888E | 346.888E | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | --- | 346.888 | 346.938E | 346.885 | 346.888 | --- | --- | --- | 11 |
| 12 | --- | --- | --- | --- | --- | 346.703E | 346.942E | 346.888E | 346.858E | --- | --- | --- | 12 |
| 13 | --- | --- | --- | --- | --- | 346.708E | 346.948E | 346.885 | 346.845 | --- | --- | --- | 13 |
| 14 | --- | 346.810 | --- | --- | --- | 346.714E | 346.854 | 346.888E | 346.848E | --- | --- | --- | 14 |
| 15 | --- | --- | --- | --- | 346.880 | 346.718E | 346.948E | 346.885 | 346.848 | --- | --- | --- | 15 |
| 16 | --- | --- | --- | --- | 346.850E | 346.728E | 346.944 | 346.900E | --- | --- | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 346.851E | 346.730E | 346.944E | 346.905E | --- | --- | --- | --- | 17 |
| 18 | --- | --- | --- | --- | 346.851E | 346.738E | 346.944E | 346.910E | --- | 346.787 | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 346.851 | 346.741E | 346.945E | 346.918 | --- | --- | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 346.851E | 346.748 | 346.945E | 346.908E | --- | 346.783 | --- | --- | 20 |
| 21 | --- | --- | --- | --- | 346.851 | 346.778E | 346.945 | 346.902E | --- | --- | --- | --- | 21 |
| 22 | --- | --- | --- | --- | 346.851E | 346.813E | 346.945E | 346.888 | --- | --- | --- | --- | 22 |
| 23 | --- | --- | --- | --- | 346.851 | 346.848 | 346.945 | 346.888E | --- | --- | --- | --- | 23 |
| 24 | --- | --- | --- | --- | 346.847E | 346.848E | 346.945E | 346.888E | --- | --- | --- | --- | 24 |
| 25 | --- | --- | --- | 346.832 | 346.884E | 346.848 | 346.945 | 346.895 | --- | --- | --- | --- | 25 |
| 26 | --- | --- | --- | --- | 346.700 | --- | 346.838E | 346.888E | --- | --- | --- | --- | 26 |
| 27 | --- | --- | --- | --- | 346.700E | --- | 346.832E | 346.888 | --- | --- | --- | --- | 27 |
| 28 | --- | --- | --- | --- | 346.700 | --- | 346.825 | 346.858E | --- | --- | --- | --- | 28 |
| 29 | --- | | --- | --- | 346.700E | --- | 346.825E | 346.870 | --- | --- | --- | --- | 29 |
| 30 | --- | | --- | --- | 346.700 | --- | 346.825 | 346.878E | --- | --- | --- | --- | 30 |
| 31 | --- | | --- | | 346.700E | | 346.825E | 346.878E | | --- | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | --- | --- | 346.898 | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | --- | 346.935 | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | --- | --- | 346.878 | --- | --- | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 11 52 N
LONG 95 20 14 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1987

DRAINAGE AREA,
24.3 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## MORRIS RIVER NEAR ROSENORT - STATION NO. 05OF020

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 | B | 3.27 | 0.023 | 0.188 | 0.073 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 | B | 1.82 | 0.040 | 0.081 | 0.088 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 | B | 0.813 | 0.032 | 0.014 | 0.081 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 | B | 0.488 | 0.023 | 0.012A | 0.048 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 | B | 0.388 | 0.020 | 0.010 | 0.031 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0 | B | 0.331 | 0.018 | 0.022 | 0.024 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0 | B | 0.288 | 0.041 | 0.033 | 0.017 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0 | B | 0.274 | 0.035 | 0.078 | 0.011 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0 | B | 0.234 | 0.037 | 0.088 | 0.005 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0 | B | 0.183 | 0.077 | 0.098 | 0.001 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0 | B | 0.161 | 0.128 | 0.084 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0 | B | 0.152 | 0.174 | 0.087 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.100 | B | 0.134 | 0.208 | 0.068 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.800 | B | 0.123 | 0.234 | 0.058 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 5.00 | B | 0.117 | 0.278 | 0.057 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 16.8 | B | 0.101 | 0.278 | 0.048 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 21.1 | B | 0.091 | 0.142 | 0.031 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 19.7 | B | 0.081 | 0.081 | 0.038 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 23.7 | B | 0.070 | 0.035 | 0.034 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 28.5 | B | 0.088 | 0.022 | 0.027 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 28.8 | B | 0.048 | 0.028 | 0.031 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 28.4 | B | 0.047 | 0.018 | 0.038 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 21.4 | | 0.033 | 0.021 | 0.046 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 14.2 | | 0.022 | 0.028 | 0.052 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 9.48 | | 0.013 | 0.088 | 0.055 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 8.25 | | 0.008 | 0.078 | 0.080 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 7.23 | | 0.021 | 0.071 | 0.070 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 6.41 | | 0.048 | 0.082 | 0.078 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 5.68 | | 0.018 | 0.184 | 0.078 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 4.70 | | 0.012A | 0.142 | 0.078 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | | 0.008 | | 0.082 | 0 | | 0 | --- | --- | 31 |
| TOTAL | --- | --- | 0 | 393.830 | | 8.580 | 2.588 | 1.787 | 0.317 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 8.48 | | 0.308 | 0.088 | 0.058 | 0.010 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 28.5 | | 3.27 | 0.278 | 0.188 | 0.073 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | | 0.008 | 0.018 | 0.010 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 1.08
MAXIMUM DAILY, 28.8B ON APR 28
MINIMUM DAILY, 0B ON MAR 1

### SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 39 33 N
LONG 97 28 51 W
DRAINAGE AREA, 2 200 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 158 |
| FEB | --- | AUG | 27.4 |
| MAR | 0 | SEP | 0 |
| APR | 31 800 | OCT | 0 |
| MAY | 838 | NOV | --- |
| JUN | 223 | DEC | --- |

TOTAL DISCHARGE, 33 100 dam³

## MOOSEY RIVER BELOW OUTLET OF DAUPHIN LAKE - STATION NO. 05LJ025

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.3218 | 0.3398 | 0.3408 | 0.2408 | 0.181 | 0.347 | 0.201 | 0.138 | 0.108 | 0.119 | 0.342 | 0.1718 | 1 |
| 2 | 0.3118 | 0.3298 | 0.3758 | 0.3758 | 0.183 | 0.333 | 0.140 | 0.189 | 0.087 | 0.138 | 0.323 | 0.1708 | 2 |
| 3 | 0.3078 | 0.3158 | 0.3238 | 0.3878 | 0.188 | 0.307 | 0.088 | 0.178 | 0.087 | 0.143 | 0.313 | 0.1788 | 3 |
| 4 | 0.2878 | 0.2938 | 0.3898 | 0.4488 | 0.150 | 0.288 | 0.087 | 0.135 | 0.048 | 0.188 | 0.295 | 0.1738 | 4 |
| 5 | 0.2708 | 0.3088 | 0.4068 | 0.4068 | 0.143 | 0.308 | 0.042 | 0.098 | 0.058 | 0.180 | 0.288 | 0.1778 | 5 |
| 6 | 0.2638 | 0.3068 | 0.4328 | 0.2188 | 0.153 | 0.322 | 0.085 | 0.118 | 0.098 | 0.184 | 0.280 | 0.1778 | 6 |
| 7 | 0.2638 | 0.2938 | 0.4528 | 0.1708 | 0.138 | 0.338 | 0.086 | 0.134 | 0.122 | 0.178 | 0.243 | 0.1818 | 7 |
| 8 | 0.2868 | 0.3018 | 0.4368 | 0.1748 | 0.144 | 0.328 | 0.122 | 0.154 | 0.121 | 0.193 | 0.242 | 0.1838 | 8 |
| 9 | 0.3018 | 0.3218 | 0.4068 | 0.2188 | 0.156 | 0.351 | 0.197 | 0.185 | 0.103 | 0.208 | 0.245 | 0.1738 | 9 |
| 10 | 0.3078 | 0.3318 | 0.3738 | 0.213 | 0.182 | 0.383 | 0.221 | 0.172 | 0.078 | 0.208 | 0.240 | 0.1718 | 10 |
| 11 | 0.3288 | 0.3248 | 0.3638 | 0.214 | 0.181 | 0.417 | 0.216 | 0.194 | 0.058 | 0.188 | 0.240 | 0.1888 | 11 |
| 12 | 0.3328 | 0.3208 | 0.3488 | 0.228 | 0.172 | 0.483 | 0.228 | 0.224 | 0.081 | 0.186 | 0.2128 | 0.1888 | 12 |
| 13 | 0.3218 | 0.3178 | 0.3408 | 0.242 | 0.168 | 0.641 | 0.197 | 0.224 | 0.109 | 0.180 | 0.2388 | 0.1788 | 13 |
| 14 | 0.3388 | 0.3288 | 0.3418 | 0.241 | 0.189 | 1.02 | 0.178 | 0.133 | 0.112 | 0.184 | 0.2388 | 0.1838 | 14 |
| 15 | 0.3548 | 0.3488 | 0.3508 | 0.237 | 0.182 | 0.828 | 0.156 | 0.122 | 0.114 | 0.180 | 0.2388 | 0.1828 | 15 |
| 16 | 0.3488 | 0.3498 | 0.3688 | 0.213 | 0.238 | 0.433 | 0.154 | 0.128 | 0.128 | 0.158 | 0.2188 | 0.1888 | 16 |
| 17 | 0.3508 | 0.3458 | 0.3958 | 0.197 | 0.246 | 0.348 | 0.149 | 0.126 | 0.146 | 0.148 | 0.2128 | 0.1858 | 17 |
| 18 | 0.3518 | 0.3328 | 0.4278 | 0.195 | 0.237 | 0.278 | 0.132 | 0.180 | 0.145 | 0.151 | 0.2048 | 0.1888 | 18 |
| 19 | 0.3428 | 0.3338 | 0.4528 | 0.198 | 0.225 | 0.237 | 0.118 | 0.246 | 0.158 | 0.184 | 0.2078 | 0.1858 | 19 |
| 20 | 0.3418 | 0.3218 | 0.4788 | 0.190 | 0.222 | 0.217 | 0.136 | 0.186 | 0.194 | 0.189 | 0.2368 | 0.1718 | 20 |
| 21 | 0.3418 | 0.2988 | 0.4988 | 0.190 | 0.232 | 0.182 | 0.108 | 0.098 | 0.140 | 0.178 | 0.2418 | 0.1888 | 21 |
| 22 | 0.3378 | 0.2888 | 0.5088 | 0.193 | 0.242 | 0.160 | 0.071 | 0.088 | 0.131 | 0.187 | 0.2318 | 0.1898 | 22 |
| 23 | 0.3318 | 0.2948 | 0.5128 | 0.190 | 0.287 | 0.151 | 0.085 | 0.047 | 0.162 | 0.189 | 0.2218 | 0.1888 | 23 |
| 24 | 0.3518 | 0.2928 | 0.5018 | 0.178 | 0.283 | 0.140 | 0.080 | 0.089 | 0.158 | 0.193 | 0.2158 | 0.1888 | 24 |
| 25 | 0.3748 | 0.2858 | 0.4878 | 0.188 | 0.330 | 0.130 | 0.108 | 0.102 | 0.159 | 0.209 | 0.2128 | 0.1788 | 25 |
| 26 | 0.3828 | 0.2438 | 0.4308 | 0.187 | 0.333 | 0.180 | 0.108 | 0.107 | 0.134 | 0.210 | 0.1888 | 0.1828 | 26 |
| 27 | 0.3738 | 0.2388 | 0.3968 | 0.185 | 0.333 | 0.174 | 0.101 | 0.048 | 0.120 | 0.230 | 0.1858 | 0.1838 | 27 |
| 28 | 0.3578 | 0.2318 | 0.3808 | 0.182 | 0.320 | 0.228 | 0.134 | 0.018 | 0.122 | 0.280 | 0.1818 | 0.1828 | 28 |
| 29 | 0.3468 | | 0.3648 | 0.183 | 0.325 | 0.284 | 0.153 | 0.208 | 0.134 | 0.314 | 0.1888 | 0.1858 | 29 |
| 30 | 0.3448 | | 0.3458 | 0.181 | 0.334 | 0.281 | 0.148 | 0.272 | 0.141 | 0.389 | 0.1858 | 0.1798 | 30 |
| 31 | 0.3818 | | 0.3488 | | 0.348 | | 0.135 | 0.178 | | 0.384 | | 0.1808 | 31 |
| TOTAL | 10.207 | 8.898 | 12.296 | 8.821 | 8.818 | 10.078 | 4.082 | 4.411 | 3.481 | 8.042 | 7.000 | 5.337 | TOTAL |
| MEAN | 0.329 | 0.307 | 0.397 | 0.227 | 0.223 | 0.336 | 0.132 | 0.142 | 0.118 | 0.195 | 0.233 | 0.172 | MEAN |
| MAX | 0.382 | 0.349 | 0.512 | 0.448 | 0.348 | 1.02 | 0.228 | 0.272 | 0.184 | 0.389 | 0.343 | 0.193 | MAX |
| MIN | 0.263 | 0.231 | 0.340 | 0.183 | 0.138 | 0.130 | 0.042 | 0.018 | 0.048 | 0.119 | 0.188 | 0.161 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.234
MAXIMUM DAILY, 1.02 ON JUN 14
MINIMUM DAILY, 0.018 ON AUG 28
MAXIMUM INSTANTANEOUS,
1.14 AT 09:22 CST ON JUN 14

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 27 00 N
LONG 99 58 00 W
DRAINAGE AREA, 8 700 km²

B - ICE CONDITIONS

REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 882 | JUL | 383 |
| FEB | 743 | AUG | 381 |
| MAR | 1 080 | SEP | 301 |
| APR | 888 | OCT | 622 |
| MAY | 808 | NOV | 606 |
| JUN | 871 | DEC | 481 |

TOTAL DISCHARGE, 7 370 dam³

## MOWBRAY CREEK NEAR MOWBRAY - STATION NO. 05OB021

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0B | 0B | 0B | 0 B | 0.208 | 0.022 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2 | 0B | 0B | 0B | 0 B | 0.171 | 0.015 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 3 | 0B | 0B | 0B | 0 B | 0.138 | 0.007 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 4 | 0B | 0B | 0B | 0 B | 0.105 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 5 | 0B | 0B | 0B | 0 B | 0.074 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 6 | 0B | 0B | 0B | 0 B | 0.057 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 7 | 0B | 0B | 0B | 0.0048 | 0.044 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 8 | 0B | 0B | 0B | 0.1428 | 0.040 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 9 | 0B | 0B | 0B | 0.0978 | 0.022 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 10 | 0B | 0B | 0B | 0.1728 | 0.018 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 11 | 0B | 0B | 0B | 0.1188 | 0.013 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 12 | 0B | 0B | 0B | 0.2718 | 0.010 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 13 | 0B | 0B | 0B | 0.5408 | 0.008 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 14 | 0B | 0B | 0B | 0.8128 | 0.008 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 15 | 0B | 0B | 0B | 1.02 B | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| 16 | 0B | 0B | 0B | 1.08 B | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 17 | 0B | 0B | 0B | 2.84 B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 18 | 0B | 0B | 0B | 4.80 B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 19 | 0B | 0B | 0B | 6.67 B | 0.107 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 20 | 0B | 0B | 0B | 3.78 | 0.118 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| 21 | 0B | 0B | 0B | 1.73 | 0.102 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| 22 | 0B | 0B | 0B | 1.07 | 0.090 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| 23 | 0B | 0B | 0B | 1.33 | 0.077 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| 24 | 0B | 0B | 0B | 1.01 | 0.068 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 25 | 0B | 0B | 0B | 0.733 | 0.061 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 |
| 26 | 0B | 0B | 0B | 0.524 | 0.052 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| 27 | 0B | 0B | 0B | 0.398 | 0.044 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 |
| 28 | 0B | 0B | 0B | 0.337 | 0.042 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| 29 | 0B | | 0B | 0.287 | 0.038 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| 30 | 0B | | 0B | 0.262 | 0.033 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 |
| 31 | 0B | | 0B | | 0.029 | | 0 | 0 | | 0 | | 0 | 31 |
| TOTAL | 0 | 0 | 0 | 38.793 | 1.785 | 0.047 | 0 | 0 | 0 | 0 | 0 | 0 | TOTAL |
| MEAN | 0 | 0 | 0 | 0.880 | 0.058 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | MEAN |
| MAX | 0 | 0 | 0 | 8.67 | 0.208 | 0.022 | 0 | 0 | 0 | 0 | 0 | 0 | MAX |
| MIN | 0 | 0 | 0 | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.084
MAXIMUM DAILY, 8.670 ON APR 19
MINIMUM DAILY, 0B ON JAN 1
MAXIMUM INSTANTANEOUS,
11.10 AT 07:34 CST ON APR 19

SUMMARY FOR THE YEAR 1989

INTERNATIONAL GAUGING STATION
TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 00 00 N
LONG 96 27 16 W
DRAINAGE AREA, 262 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 0 | JUL | 0 |
| FEB | 0 | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 2 400 | OCT | 0 |
| MAY | 154 | NOV | 0 |
| JUN | 4.08 | DEC | 0 |

TOTAL DISCHARGE, 2 550 dam³

## NELSON RIVER (EAST CHANNEL) BELOW SEA RIVER FALLS - STATION NO. 05UB008

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1130 | 1110 | 1220 | 1490 | 2150 | 325 | 429 | 434 | 377 | 181 | 218 | 1740 | 1 |
| 2 | 1130 | 1110 | 1220 | 1500 | 2180 | 330 | 443 | 422 | 383 | 184 | 2170 | 1720 | 2 |
| 3 | 1130 | 1110 | 1230 | 1520 | 2260 | 303 | 410 | 417 | 381 | 236 | 2220 | 1730 | 3 |
| 4 | 1110 | 1110 | 1230 | 1530 | 2290 | 313 | 407 | 398 | 412 | 272 | 2310 | 1740 | 4 |
| 5 | 1110 | 1120 | 1240 | 1550 | 2350 | 338 | 393 | 387 | 401 | 285 | 2350 | 1720 | 5 |
| 6 | 1110 | 1120 | 1250 | 1580 | 2420 | 315 | 378 | 373 | 371 | 178 | 2350 | 1700 | 6 |
| 7 | 1100 | 1120 | 1260 | 1670 | 2470 | 300 | 403 | 382 | 382 | 187 | 2340 | 1680 | 7 |
| 8 | 1100 | 1130 | 1260 | 1680 | 2530 | 325 | 402 | 404 | 388 | 284 | 2300 | 1660 | 8 |
| 9 | 1080 | 1130 | 1270 | 1800 | 2600 | 348 | 402 | 418 | 388 | 281 | 2210 | 1640 | 9 |
| 10 | 1090 | 1130 | 1280 | 1810 | 2670 | 328 | 389 | 418 | 369 | 272 | 2000 | 1620 | 10 |
| 11 | 1080 | 1130 | 1280 | 1830 | 2750 | 322 | 381 | 420 | 348 | 287 | 1930 | 1610 | 11 |
| 12 | 1080 | 1140 | 1280 | 1840 | 2830 | 332 | 383 | 404 | 382 | 278 | 1900 | 1580 | 12 |
| 13 | 1080 | 1140 | 1300 | 1880 | 2930 | 272 | 402 | 380 | 411 | 265 | 1885 | 1580 | 13 |
| 14 | 1080 | 1150 | 1310 | 1880 | 302 | 324 | 413 | 381 | 384 | 257 | 1800 | 1580 | 14 |
| 15 | 1080 | 1150 | 1310 | 1700 | 308 | 383 | 413 | 407 | 381 | 260 | 1780 | 1550 | 15 |
| 16 | 1080 | 1160 | 1320 | 1720 | 311 | 388 | 423 | 412 | 384 | 248 | 1770 | 1530 | 16 |
| 17 | 1090 | 1160 | 1330 | 1740 | 321 | 413 | 431 | 423 | 382 | 287 | 1770 | 1520 | 17 |
| 18 | 1080 | 1170 | 1340 | 1780 | 338 | 380 | 418 | 448 | 334 | 303 | 1780 | 1500 | 18 |
| 19 | 1080 | 1170 | 1350 | 1780 | 325 | 389 | 423 | 383 | 335 | 371 | 1780 | 1480 | 19 |
| 20 | 1090 | 1180 | 1380 | 1800 | 344 | 403 | 431 | 345 | 350 | 318 | 1770 | 1470 | 20 |
| 21 | 1080 | 1180 | 1370 | 1830 | 344 | 381 | 431 | 387 | 381 | 322 | 1770 | 1480 | 21 |
| 22 | 1080 | 1180 | 1380 | 1880 | 347 | 348 | 487 | 388 | 384 | 321 | 1780 | 1450 | 22 |
| 23 | 1080 | 1180 | 1380 | 1880 | 327 | 344 | 454 | 378 | 381 | 289 | 1780 | 1440 | 23 |
| 24 | 1100 | 1200 | 1400 | 1920 | 289 | 348 | 438 | 421 | 348 | 289 | 1800 | 1440 | 24 |
| 25 | 1100 | 1200 | 1410 | 1880 | 338 | 382 | 481 | 444 | 342 | 325 | 1820 | 1430 | 25 |
| 26 | 1100 | 1210 | 1410 | 1880 | 224 | 337 | 412 | 448 | 384 | 288 | 1830 | 1410 | 26 |
| 27 | 1100 | 1210 | 1430 | 2010 | 274 | 344 | 387 | 413 | 380 | 187 | 1840 | 1400 | 27 |
| 28 | 1100 | 1210 | 1440 | 2040 | 277 | 381 | 396 | 391 | 321 | 278 | 1840 | 1400 | 28 |
| 29 | 1110 | | 1450 | 2080 | 307 | 411 | 418 | 351 | 274 | 280 | 1780 | 1380 | 29 |
| 30 | 1110 | | 1470 | 2120 | 323 | 404 | 427 | 383 | 280 | 241 | 1780 | 1380 | 30 |
| 31 | 1110 | | 1480 | | 330 | | 431 | 372 | | 243 | | 1380 | 31 |
| TOTAL | 3 408 | 3 233 | 4 128 | 5 230 | 8 782 | 10 380 | 12 841 | 12 384 | 10 484 | 8 224 | 5 859 | 4 791 | TOTAL |
| MEAN | 110 | 115 | 133 | 174 | 283 | 346 | 414 | 399 | 349 | 265 | 195 | 155 | MEAN |
| MAX | 113 | 121 | 148 | 212 | 347 | 413 | 457 | 448 | 412 | 371 | 238 | 174 | MAX |
| MIN | 109 | 111 | 122 | 148 | 218 | 233 | 387 | 345 | 242 | 181 | 178 | 138 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 246
MAXIMUM DAILY, 467 ON JUL 22
MINIMUM DAILY, 1080 ON JAN 8
MAXIMUM INSTANTANEOUS,
480 AT 17:00 CST ON JUL 25

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 54 14 39 N
LONG 97 35 27 W

B - ICE CONDITIONS

REGULATED SINCE 1973

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 294 000 | JUL | 1 110 000 |
| FEB | 279 000 | AUG | 1 070 000 |
| MAR | 357 000 | SEP | 904 000 |
| APR | 452 000 | OCT | 711 000 |
| MAY | 759 000 | NOV | 506 000 |
| JUN | 895 000 | DEC | 414 000 |

TOTAL DISCHARGE, 7 780 000 dam³

## NELSON RIVER (WEST CHANNEL) AT JENPEG - STATION NO. 05UB003

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 300 | 1 150 | 1 120 | 1 010 | 846 | 899 | 889 | 1 080 | 1 390 | 1 780 | 1 840 | 1 880 | 1 |
| 2 | 1 280 | 1 150 | 1 130 | 1 000 | 848 | 887 | 887 | 1 100 | 1 390 | 1 830 | 1 820 | 1 850 | 2 |
| 3 | 1 280 | 1 150 | 1 130 | 954 | 834 | 887 | 705 | 1 100 | 1 380 | 1 850 | 1 880 | 1 840 | 3 |
| 4 | 1 280 | 1 150 | 1 130 | 941 | 871 | 888 | 710 | 1 080 | 1 490 | 1 840 | 1 850 | 1 880 | 4 |
| 5 | 1 270 | 1 170 | 1 130 | 944 | 1 290 | 817 | 705 | 1 100 | 1 440 | 1 910 | 1 890 | 1 830 | 5 |
| 6 | 1 270 | 1 140 | 1 130 | 940 | 1 120 | 827 | 701 | 1 100 | 1 830 | 1 840 | 1 800 | 1 820 | 6 |
| 7 | 1 270 | 1 150 | 1 140 | 938 | 838 | 818 | 715 | 1 120 | 1 490 | 1 850 | 1 900 | 1 830 | 7 |
| 8 | 1 280 | 1 140 | 1 140 | 935 | 812 | 828 | 734 | 1 170 | 1 480 | 1 840 | 1 890 | 1 820 | 8 |
| 9 | 1 280 | 1 150 | 1 130 | 933 | 811 | 835 | 709 | 1 180 | 1 490 | 1 880 | 1 800 | 1 810 | 9 |
| 10 | 1 240 | 1 150 | 1 120 | 873 | 808 | 828 | 731 | 1 170 | 1 490 | 1 850 | 1 900 | 1 840 | 10 |
| 11 | 1 240 | 1 150 | 1 120 | 884 | 834 | 843 | 741 | 1 180 | 1 520 | 1 880 | 1 860 | 1 910 | 11 |
| 12 | 1 240 | 1 150 | 1 120 | 882 | 838 | 815 | 733 | 1 180 | 1 500 | 1 880 | 1 850 | 1 890 | 12 |
| 13 | 1 250 | 1 150 | 1 120 | 882 | 837 | 826 | 738 | 1 180 | 1 510 | 1 840 | 1 780 | 1 880 | 13 |
| 14 | 1 250 | 1 150 | 1 120 | 883 | 831 | 838 | 727 | 1 180 | 1 520 | 1 850 | 1 830 | 1 880 | 14 |
| 15 | 1 250 | 1 140 | 1 110 | 882 | 770 | 837 | 737 | 1 190 | 1 530 | 1 880 | 1 850 | 1 880 | 15 |
| 16 | 1 240 | 1 140 | 1 110 | 883 | 741 | 841 | 750 | 1 140 | 1 510 | 1 910 | 1 880 | 1 870 | 16 |
| 17 | 1 230 | 1 140 | 1 130 | 857 | 741 | 882 | 829 | 1 150 | 1 510 | 1 930 | 1 840 | 1 880 | 17 |
| 18 | 1 240 | 1 150 | 1 140 | 881 | 787 | 836 | 839 | 1 140 | 1 540 | 1 940 | 1 880 | 1 880 | 18 |
| 19 | 1 240 | 1 140 | 1 130 | 869 | 732 | 851 | 859 | 1 140 | 1 550 | 1 900 | 1 910 | 1 880 | 19 |
| 20 | 1 230 | 1 140 | 1 080 | 868 | 733 | 886 | 883 | 1 150 | 1 880 | 1 890 | 1 870 | 1 870 | 20 |
| 21 | 1 230 | 1 150 | 1 070 | 852 | 738 | 887 | 843 | 1 210 | 1 840 | 1 910 | 1 770 | 1 880 | 21 |
| 22 | 1 230 | 1 150 | 1 070 | 851 | 715 | 848 | 803 | 1 240 | 1 850 | 1 910 | 1 780 | 1 850 | 22 |
| 23 | 1 210 | 1 140 | 1 070 | 853 | 840 | 883 | 825 | 1 240 | 1 850 | 1 780 | 1 800 | 1 880 | 23 |
| 24 | 1 210 | 1 120 | 1 080 | 842 | 844 | 858 | 830 | 1 230 | 1 890 | 1 780 | 1 780 | 1 850 | 24 |
| 25 | 1 210 | 1 120 | 1 080 | 824 | 847 | 857 | 877 | 1 240 | 1 770 | 1 870 | 1 800 | 1 840 | 25 |
| 26 | 1 210 | 1 120 | 1 080 | 834 | 894 | 877 | 1 000 | 1 280 | 1 800 | 1 810 | 1 840 | 1 800 | 26 |
| 27 | 1 180 | 1 120 | 1 010 | 850 | 897 | 878 | 978 | 1 250 | 1 810 | 1 880 | 1 820 | 1 880 | 27 |
| 28 | 1 180 | 1 120 | 883 | 859 | 708 | 892 | 973 | 1 250 | 1 810 | 2 030 | 1 880 | 1 720 | 28 |
| 29 | 1 180 | | 885 | 883 | 848 | 895 | 978 | 1 250 | 1 810 | 2 010 | 1 870 | 1 780 | 29 |
| 30 | 1 180 | | 885 | 878 | 887 | 701 | 985 | 1 250 | 1 800 | 2 000 | 1 880 | 1 750 | 30 |
| 31 | 1 180 | | 1 000 | | 883 | | 1 080 | 1 070 | | 1 980 | | 1 780 | 31 |
| TOTAL | 38 280 | 32 070 | 33 873 | 28 801 | 24 295 | 19 278 | 28 272 | 38 230 | 47 610 | 58 100 | 55 880 | 57 380 | TOTAL |
| MEAN | 1 240 | 1 150 | 1 090 | 887 | 782 | 843 | 815 | 1 170 | 1 880 | 1 870 | 1 880 | 1 850 | MEAN |
| MAX | 1 300 | 1 180 | 1 140 | 1 010 | 1 290 | 701 | 1 080 | 1 260 | 1 810 | 2 030 | 1 880 | 1 930 | MAX |
| MIN | 1 180 | 1 120 | 883 | 824 | 887 | 888 | 887 | 1 070 | 1 380 | 1 870 | 1 880 | 1 880 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 1 280
MAXIMUM DAILY, 2 030 ON OCT 28
MINIMUM DAILY, 887 ON MAY 30

DATA CONTRIBUTED BY -
MANITOBA HYDRO

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - POWER PLANT
LOCATION - LAT 54 28 53 N
LONG 98 02 53 W

REGULATED SINCE 1975

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 3 310 000 | JUL | 2 180 000 |
| FEB | 2 770 000 | AUG | 3 140 000 |
| MAR | 2 830 000 | SEP | 4 100 000 |
| APR | 2 300 000 | OCT | 5 020 000 |
| MAY | 2 100 000 | NOV | 4 810 000 |
| JUN | 1 870 000 | DEC | 4 880 000 |

TOTAL DISCHARGE, 39 300 000 dam³

## NELSON RIVER ABOVE BLADDER RAPIDS - STATION NO. 05UD004

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 820B | 1 340B | 1 300B | 1 180B | 1 180B | 886 | 1 080 | 1 430E | 1 780E | 2 280 | 2 240 | 2 100B | 1 |
| 2 | 1 820B | 1 340B | 1 300B | 1 180B | 1 180B | 870 | 1 040 | 1 440E | 1 770E | 2 200 | 2 210 | 2 110B | 2 |
| 3 | 1 810B | 1 340B | 1 280B | 1 180B | 1 180B | 886 | 1 080 | 1 450E | 1 780E | 2 180 | 2 200 | 2 110B | 3 |
| 4 | 1 800B | 1 340B | 1 280B | 1 180B | 1 200B | 863 | 1 080 | 1 480E | 1 780E | 2 170 | 2 200 | 2 120B | 4 |
| 5 | 1 800B | 1 330B | 1 280B | 1 170B | 1 200B | 843 | 1 080 | 1 480E | 1 800A | 2 180 | 2 200 | 2 120B | 5 |
| 6 | 1 480B | 1 330B | 1 280B | 1 180B | 1 220B | 887 | 1 100 | 1 480E | 1 840 | 2 200 | 2 200 | 2 120B | 6 |
| 7 | 1 480B | 1 320B | 1 280B | 1 180B | 1 240B | 884 | 1 080 | 1 500E | 1 880 | 2 200 | 2 200 | 2 120B | 7 |
| 8 | 1 480B | 1 320B | 1 280B | 1 180B | 1 260B | 881 | 1 080 | 1 510E | 1 880 | 2 200 | 2 180 | 2 130B | 8 |
| 9 | 1 470B | 1 320B | 1 280B | 1 180B | 1 280 | 847 | 1 100 | 1 520E | 1 880 | 2 210 | 2 180 | 2 140B | 9 |
| 10 | 1 480B | 1 320B | 1 280B | 1 140B | 1 280 | 885 | 1 110 | 1 530A | 1 900 | 2 220 | 2 170B | 2 140B | 10 |
| 11 | 1 480B | 1 320B | 1 280B | 1 140B | 1 240 | 878 | 1 110 | 1 540E | 1 910 | 2 230 | 2 180B | 2 140B | 11 |
| 12 | 1 480B | 1 310B | 1 280B | 1 130B | 1 230 | 882 | 1 110 | 1 550E | 1 890 | 2 220 | 2 130B | 2 140B | 12 |
| 13 | 1 440B | 1 310B | 1 280B | 1 120B | 1 230 | 874 | 1 120 | 1 560E | 1 890 | 2 250 | 2 120B | 2 140B | 13 |
| 14 | 1 440B | 1 310B | 1 270B | 1 120B | 1 240 | 837 | 1 130 | 1 570E | 1 930 | 2 280 | 2 100B | 2 140B | 14 |
| 15 | 1 430B | 1 310B | 1 270B | 1 120B | 1 230 | 825 | 1 130 | 1 570E | 1 950 | 2 280 | 2 100B | 2 180B | 15 |
| 16 | 1 420B | 1 300B | 1 260B | 1 120B | 1 180 | 834 | 1 150 | 1 580E | 1 950 | 2 280 | 2 090B | 2 180B | 16 |
| 17 | 1 420B | 1 300B | 1 260B | 1 110B | 1 180 | 838 | 1 180A | 1 580E | 1 970 | 2 250 | 2 080B | 2 150B | 17 |
| 18 | 1 410B | 1 300B | 1 250B | 1 110B | 1 150 | 871 | 1 180E | 1 580E | 1 950 | 2 240 | 2 080B | 2 180B | 18 |
| 19 | 1 410B | 1 300B | 1 250B | 1 110B | 1 180 | 889 | 1 210E | 1 590E | 1 890 | 2 230 | 2 070B | 2 180B | 19 |
| 20 | 1 400B | 1 300B | 1 240B | 1 110B | 1 180 | 1 000 | 1 230E | 1 590E | 1 890 | 2 280 | 2 070B | 2 180B | 20 |
| 21 | 1 400B | 1 300B | 1 230B | 1 110B | 1 150 | 1 000 | 1 260E | 1 590E | 2 010 | 2 320 | 2 080B | 2 180B | 21 |
| 22 | 1 400B | 1 300B | 1 230B | 1 110B | 1 110 | 1 010 | 1 270E | 1 600E | 2 040 | 2 320 | 2 080B | 2 150B | 22 |
| 23 | 1 390B | 1 300B | 1 220B | 1 110B | 1 100 | 1 030 | 1 280E | 1 600E | 2 050 | 2 310 | 2 080B | 2 140B | 23 |
| 24 | 1 380B | 1 300B | 1 210B | 1 120B | 1 100 | 1 030 | 1 300E | 1 610E | 2 030 | 2 300 | 2 080B | 2 140B | 24 |
| 25 | 1 380B | 1 300B | 1 200B | 1 120B | 1 080 | 1 040 | 1 320E | 1 630E | 2 070 | 2 270 | 2 070B | 2 120B | 25 |
| 26 | 1 380B | 1 300B | 1 200B | 1 130B | 1 080 | 1 040 | 1 340E | 1 650E | 2 100 | 2 280 | 2 080B | 2 100B | 26 |
| 27 | 1 370B | 1 300B | 1 200B | 1 140B | 1 040 | 1 080 | 1 350E | 1 670E | 2 080 | 2 350 | 2 080B | 2 070B | 27 |
| 28 | 1 370B | 1 300B | 1 200B | 1 140B | 1 020 | 1 040 | 1 370E | 1 690E | 2 120 | 2 320 | 2 080B | 3 040B | 28 |
| 29 | 1 380B | | 1 200B | 1 150B | 1 010 | 1 030 | 1 380E | 1 720A | 2 180 | 2 240 | 2 090B | 3 010B | 29 |
| 30 | 1 380B | | 1 200B | 1 180B | 875 | 1 030 | 1 400E | 1 740E | 2 210 | 2 250 | 2 090B | 1 980B | 30 |
| 31 | 1 380B | | 1 200B | | 888 | | 1 410E | 1 760E | | 2 250 | | 1 970B | 31 |
| TOTAL | 44 380 | 38 780 | 38 870 | 34 180 | 35 853 | 28 841 | 37 030 | 48 740 | 58 800 | 69 880 | 63 720 | 65 880 | TOTAL |
| MEAN | 1 430 | 1 310 | 1 250 | 1 140 | 1 180 | 888 | 1 190 | 1 570 | 1 950 | 2 250 | 2 120 | 2 130 | MEAN |
| MAX | 1 820 | 1 340 | 1 300 | 1 190 | 1 280 | 1 080 | 1 410 | 1 750 | 2 210 | 2 350 | 2 240 | 2 180 | MAX |
| MIN | 1 380 | 1 300 | 1 200 | 1 110 | 875 | 825 | 1 040 | 1 430 | 1 780 | 2 180 | 2 080 | 1 870 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 1 540
MAXIMUM DAILY, 2 350 ON OCT 27
MINIMUM DAILY, 825 ON JUN 18
MAXIMUM INSTANTANEOUS,
2 400 AT 16:00 CST ON OCT 27

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 54 48 30 N
LONG 97 55 50 W
DRAINAGE AREA, 897 000 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
REGULATED SINCE 1973

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 3 830 000 | JUL | 3 200 000 |
| FEB | 3 180 000 | AUG | 4 210 000 |
| MAR | 3 380 000 | SEP | 5 080 000 |
| APR | 2 950 000 | OCT | 8 020 000 |
| MAY | 3 100 000 | NOV | 5 810 000 |
| JUN | 2 580 000 | DEC | 5 870 000 |

TOTAL DISCHARGE, 48 800 000 dam³

## NELSON RIVER AT KELSEY GENERATING STATION - STATION NO. 05UE005

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 300 | 1 330 | 1 200 | 1 170 | 1 140 | 886 | 1 100 | 1 330 | 1 480 | 1 480 | 1 890 | 1 730 | 1 |
| 2 | 1 300 | 1 300 | 1 280 | 1 150 | 1 130 | 887 | 1 080 | 1 340 | 1 480 | 1 830 | 1 850 | 1 780 | 2 |
| 3 | 1 300 | 1 410 | 1 230 | 1 170 | 1 150 | 905 | 943 | 1 320 | 1 480 | 1 800 | 1 850 | 1 770 | 3 |
| 4 | 1 300 | 1 300 | 1 280 | 1 140 | 1 180 | 1 010 | 1 070 | 1 310 | 1 480 | 1 880 | 1 850 | 1 780 | 4 |
| 5 | 1 380 | 1 300 | 1 280 | 1 180 | 1 230 | 880 | 912 | 1 380 | 1 860 | 1 720 | 1 850 | 1 740 | 5 |
| 6 | 1 380 | 1 300 | 1 320 | 1 140 | 1 230 | 883 | 954 | 1 380 | 1 870 | 1 740 | 1 880 | 1 780 | 6 |
| 7 | 1 370 | 1 300 | 1 180 | 1 120 | 1 240 | 886 | 888 | 1 370 | 1 870 | 1 780 | 1 840 | 1 780 | 7 |
| 8 | 1 380 | 1 300 | 1 270 | 1 180 | 1 230 | 881 | 1 040 | 1 340 | 1 870 | 1 830 | 1 830 | 1 810 | 8 |
| 9 | 1 410 | 1 300 | 1 230 | 1 140 | 1 310 | 824 | 1 080 | 1 240 | 1 870 | 1 880 | 1 810 | 1 830 | 9 |
| 10 | 1 300 | 1 300 | 1 180 | 1 130 | 1 330 | 851 | 1 030 | 1 300 | 1 870 | 1 880 | 1 820 | 1 810 | 10 |
| 11 | 1 300 | 1 300 | 1 180 | 1 110 | 1 330 | 853 | 978 | 1 380 | 1 880 | 1 880 | 1 880 | 1 820 | 11 |
| 12 | 1 380 | 1 300 | 1 180 | 1 110 | 1 350 | 817 | 1 010 | 1 380 | 1 880 | 1 850 | 1 820 | 1 830 | 12 |
| 13 | 1 320 | 1 300 | 1 200 | 1 100 | 1 370 | 834 | 1 080 | 1 380 | 1 880 | 1 840 | 1 740 | 1 810 | 13 |
| 14 | 1 370 | 1 300 | 1 180 | 1 080 | 1 240 | 870 | 1 240 | 1 410 | 1 880 | 1 830 | 1 880 | 1 820 | 14 |
| 15 | 1 370 | 1 280 | 1 220 | 1 100 | 1 240 | 884 | 1 180 | 1 380 | 1 880 | 1 820 | 1 880 | 1 820 | 15 |
| 16 | 1 350 | 1 330 | 1 270 | 1 080 | 1 340 | 1 080 | 1 300 | 1 400 | 1 880 | 1 830 | 1 880 | 1 830 | 16 |
| 17 | 1 320 | 1 310 | 1 280 | 1 090 | 1 250 | 788 | 1 180 | 1 380 | 1 880 | 1 840 | 1 870 | 1 830 | 17 |
| 18 | 1 380 | 1 300 | 1 300 | 1 100 | 1 240 | 828 | 1 080 | 1 380 | 1 880 | 1 850 | 1 870 | 1 840 | 18 |
| 19 | 1 300 | 1 280 | 1 180 | 1 040 | 1 180 | 892 | 1 240 | 1 380 | 1 880 | 1 840 | 1 870 | 1 810 | 19 |
| 20 | 1 380 | 1 210 | 1 320 | 1 040 | 1 180 | 917 | 1 230 | 1 380 | 1 880 | 1 870 | 1 880 | 1 820 | 20 |
| 21 | 1 300 | 1 170 | 1 180 | 1 030 | 1 180 | 838 | 1 180 | 1 380 | 1 880 | 1 900 | 1 700 | 1 820 | 21 |
| 22 | 1 310 | 1 180 | 1 130 | 887 | 1 280 | 804 | 1 070 | 1 370 | 1 880 | 1 800 | 1 700 | 1 840 | 22 |
| 23 | 1 380 | 1 180 | 1 180 | 1 030 | 1 210 | 1 040 | 887 | 1 430 | 1 440 | 1 800 | 1 730 | 1 840 | 23 |
| 24 | 1 300 | 1 190 | 1 180 | 1 100 | 1 210 | 903 | 1 310 | 1 480 | 1 370 | 2 000 | 1 730 | 1 840 | 24 |
| 25 | 1 310 | 1 190 | 1 150 | 1 080 | 1 080 | 883 | 1 220 | 1 470 | 1 380 | 1 880 | 1 730 | 1 840 | 25 |
| 26 | 1 300 | 1 210 | 1 130 | 1 080 | 1 140 | 805 | 1 210 | 1 350 | 1 380 | 1 830 | 1 730 | 1 840 | 26 |
| 27 | 1 340 | 1 220 | 1 230 | 1 120 | 1 180 | 848 | 1 180 | 1 330 | 1 380 | 1 800 | 1 730 | 1 840 | 27 |
| 28 | 1 340 | 1 240 | 1 120 | 1 080 | 1 210 | 1 020 | 1 210 | 1 480 | 1 380 | 1 880 | 1 730 | 1 840 | 28 |
| 29 | 1 320 | | 1 180 | 1 110 | 1 080 | 1 040 | 1 240 | 1 470 | 1 380 | 2 000 | 1 700 | 1 840 | 29 |
| 30 | 1 300 | | 1 180 | 1 080 | 1 130 | 1 130 | 1 310 | 1 480 | 1 480 | 2 010 | 1 710 | 1 840 | 30 |
| 31 | 1 430 | | 1 230 | | 1 080 | | 1 330 | 1 480 | | 2 010 | | 1 840 | 31 |
| TOTAL | 41 470 | 35 850 | 37 850 | 32 957 | 37 800 | 27 880 | 34 731 | 42 730 | 45 470 | 57 080 | 53 780 | 58 210 | TOTAL |
| MEAN | 1 340 | 1 270 | 1 210 | 1 100 | 1 210 | 929 | 1 120 | 1 380 | 1 520 | 1 840 | 1 790 | 1 810 | MEAN |
| MAX | 1 430 | 1 410 | 1 320 | 1 170 | 1 370 | 1 130 | 1 330 | 1 480 | 1 580 | 2 010 | 1 880 | 1 840 | MAX |
| MIN | 1 300 | 1 170 | 1 120 | 887 | 1 080 | 788 | 912 | 1 240 | 1 370 | 1 480 | 1 680 | 1 730 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 1 380
MAXIMUM DAILY, 2 010 ON OCT 30
MINIMUM DAILY, 788 ON JUN 17

DATA CONTRIBUTED BY -
MANITOBA HYDRO

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - POWER PLANT
LOCATION - LAT 56 03 30 N
LONG 98 31 30 W
DRAINAGE AREA, 1 010 000 km²

REGULATED SINCE 1980

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 3 580 000 | JUL | 3 000 000 |
| FEB | 3 080 000 | AUG | 3 530 000 |
| MAR | 3 340 000 | SEP | 3 830 000 |
| APR | 2 880 000 | OCT | 4 830 000 |
| MAY | 3 260 000 | NOV | 4 850 000 |
| JUN | 2 410 000 | DEC | 4 880 000 |

TOTAL DISCHARGE, 43 500 000 dam³

## NELSON RIVER AT KETTLE GENERATING STATION - STATION NO. 05UF005

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 110 | 3 040 | 3 150 | 1 470 | 2 300 | 2 770 | 682 | 2 840 | 2 900 | 2 150 | 3 120 | 2 520 | 1 |
| 2 | 2 520 | 3 080 | 3 230 | 700 | 1 880 | 2 570 | 704 | 2 790 | 2 080 | 3 240 | 3 380 | 2 380 | 2 |
| 3 | 2 490 | 3 280 | 2 870 | 1 940 | 1 710 | 1 880 | 1 890 | 2 850 | 1 480 | 3 240 | 3 520 | 1 900 | 3 |
| 4 | 2 210 | 2 430 | 1 780 | 2 090 | 2 090 | 1 430 | 2 080 | 2 850 | 1 520 | 3 120 | 2 940 | 2 180 | 4 |
| 5 | 2 140 | 1 330 | 1 300 | 1 880 | 2 680 | 2 430 | 3 000 | 1 200 | 2 750 | 2 940 | 2 300 | 2 340 | 5 |
| 6 | 2 370 | 1 880 | 2 800 | 2 070 | 1 740 | 2 210 | 2 780 | 1 010 | 2 880 | 2 880 | 2 980 | 3 140 | 6 |
| 7 | 2 480 | 2 030 | 2 480 | 2 410 | 718 | 2 530 | 2 800 | 1 240 | 3 080 | 1 940 | 2 880 | 3 550 | 7 |
| 8 | 2 620 | 2 280 | 1 800 | 2 080 | 2 310 | 2 100 | 2 080 | 1 910 | 3 010 | 1 430 | 3 080 | 2 920 | 8 |
| 9 | 3 000 | 2 040 | 2 030 | 1 810 | 2 110 | 2 400 | 1 380 | 2 630 | 2 610 | 2 100 | 3 170 | 2 380 | 9 |
| 10 | 2 890 | 1 740 | 1 870 | 2 480 | 2 180 | 1 430 | 2 790 | 3 000 | 2 080 | 2 180 | 3 080 | 2 800 | 10 |
| 11 | 2 260 | 1 330 | 1 810 | 2 270 | 2 200 | 888 | 2 580 | 3 180 | 2 880 | 2 820 | 2 430 | 3 880 | 11 |
| 12 | 2 080 | 1 710 | 1 440 | 2 180 | 2 570 | 2 310 | 2 480 | 2 250 | 2 880 | 2 900 | 2 320 | 3 830 | 12 |
| 13 | 1 880 | 2 400 | 2 880 | 3 080 | 3 110 | 1 890 | 2 050 | 1 380 | 2 870 | 3 340 | 2 840 | 3 800 | 13 |
| 14 | 1 240 | 2 380 | 3 110 | 2 270 | 2 520 | 1 880 | 1 870 | 2 280 | 2 900 | 2 030 | 2 890 | 3 840 | 14 |
| 15 | 1 880 | 2 820 | 3 030 | 1 810 | 2 880 | 1 970 | 1 280 | 2 180 | 2 810 | 1 820 | 3 070 | 3 820 | 15 |
| 16 | 2 330 | 2 870 | 3 200 | 1 880 | 3 010 | 1 840 | 1 050 | 2 850 | 2 230 | 2 780 | 3 130 | 2 800 | 16 |
| 17 | 2 380 | 3 080 | 3 180 | 2 800 | 2 840 | 1 840 | 2 230 | 3 880 | 2 320 | 3 080 | 2 830 | 2 680 | 17 |
| 18 | 2 120 | 2 080 | 2 080 | 2 380 | 2 880 | 1 140 | 1 730 | 3 020 | 3 080 | 3 110 | 3 780 | 3 820 | 18 |
| 19 | 2 080 | 1 400 | 874 | 1 480 | 3 050 | 2 520 | 1 880 | 2 440 | 2 900 | 2 810 | 1 440 | 3 380 | 19 |
| 20 | 2 480 | 2 110 | 2 080 | 1 870 | 2 380 | 2 330 | 1 730 | 2 300 | 2 900 | 2 830 | 2 220 | 3 880 | 20 |
| 21 | 1 780 | 2 130 | 1 870 | 1 980 | 2 840 | 2 370 | 1 880 | 3 010 | 2 880 | 2 180 | 2 800 | 3 830 | 21 |
| 22 | 1 880 | 2 480 | 1 880 | 1 830 | 3 080 | 2 180 | 1 780 | 3 030 | 3 130 | 1 800 | 3 180 | 3 440 | 22 |
| 23 | 2 780 | 2 810 | 1 420 | 1 380 | 3 100 | 2 040 | 1 770 | 3 140 | 2 880 | 2 510 | 2 840 | 2 130 | 23 |
| 24 | 2 870 | 2 010 | 743 | 2 740 | 2 870 | 1 820 | 2 800 | 3 120 | 2 480 | 2 510 | 2 780 | 1 320 | 24 |
| 25 | 2 850 | 1 700 | 888 | 2 480 | 2 870 | 857 | 2 700 | 2 820 | 3 010 | 2 400 | 2 020 | 1 270 | 25 |
| 26 | 2 480 | 1 780 | 881 | 2 880 | 2 780 | 2 480 | 2 880 | 1 830 | 2 830 | 2 800 | 2 740 | 1 880 | 26 |
| 27 | 1 880 | 2 870 | 1 980 | 2 880 | 1 810 | 2 080 | 2 180 | 1 480 | 2 780 | 3 070 | 3 420 | 1 740 | 27 |
| 28 | 1 880 | 2 720 | 2 780 | 2 310 | 1 880 | 1 880 | 1 880 | 2 700 | 2 880 | 3 330 | 3 220 | 2 100 | 28 |
| 29 | 1 810 | | 2 880 | 1 850 | 2 420 | 1 840 | 1 340 | 2 820 | 2 870 | 3 380 | 2 880 | 3 310 | 29 |
| 30 | 2 180 | | 2 780 | 708 | 3 110 | 2 070 | 1 350 | 2 880 | 3 230 | 3 210 | 2 230 | 2 870 | 30 |
| 31 | 2 880 | | 2 320 | | 2 820 | | 2 240 | 2 780 | | 3 200 | | 2 420 | 31 |
| TOTAL | 88 280 | 82 800 | 87 447 | 88 078 | 78 088 | 88 813 | 81 340 | 78 480 | 80 230 | 80 420 | 84 330 | 85 870 | TOTAL |
| MEAN | 2 230 | 2 240 | 2 180 | 1 870 | 2 880 | 1 880 | 2 430 | 2 870 | 2 880 | 2 810 | 2 770 | MEAN | |
| MAX | 3 000 | 3 280 | 3 230 | 2 740 | 3 110 | 2 770 | 3 000 | 3 130 | 3 340 | 3 520 | 3 840 | MAX | |
| MIN | 1 340 | 1 320 | 881 | 700 | 718 | 857 | 704 | 1 010 | 1 480 | 1 430 | 1 440 | 1 270 | MIN |

### SUMMARY FOR THE YEAR 1988

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 2 380
MAXIMUM DAILY, 3 840 ON DEC 14
MINIMUM DAILY, 881 ON MAR 28

TYPE OF GAUGE - POWER PLANT
LOCATION - LAT 58 32 48 N
LONG 94 38 02 W

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 8 880 000 | JUL | 8 300 000 |
| FEB | 8 430 000 | AUG | 8 820 000 |
| MAR | 8 830 000 | SEP | 8 830 000 |
| APR | 8 100 000 | OCT | 8 980 000 |
| MAY | 8 870 000 | NOV | 7 280 000 |
| JUN | 8 180 000 | DEC | 7 430 000 |

TOTAL DISCHARGE, 74 800 000 dam³

DATA CONTRIBUTED BY -
MANITOBA HYDRO

REGULATED SINCE 1970

REMARKS - FLOW CALCULATED FROM GENERATION AND SPILL TABLES

## NELSON RIVER AT LONG SPRUCE GENERATING STATION - STATION NO. 05UF007

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 130 | 3 000 | 3 220 | 1 810 | 2 280 | 2 810 | 938 | 2 880 | 2 880 | 2 210 | 3 180 | 2 800 | 1 |
| 2 | 2 880 | 3 140 | 3 270 | 772 | 1 820 | 2 870 | 787 | 2 810 | 2 120 | 3 320 | 3 370 | 2 370 | 2 |
| 3 | 2 820 | 3 340 | 2 880 | 1 810 | 1 780 | 1 880 | 1 910 | 2 880 | 1 880 | 3 320 | 3 880 | 1 820 | 3 |
| 4 | 2 180 | 2 400 | 1 400 | 2 120 | 2 130 | 1 820 | 2 070 | 2 980 | 1 840 | 3 180 | 2 880 | 2 200 | 4 |
| 5 | 3 120 | 1 380 | 1 280 | 2 010 | 2 880 | 2 480 | 3 110 | 1 220 | 2 870 | 2 980 | 2 310 | 2 380 | 5 |
| 6 | 2 440 | 1 880 | 3 000 | 2 130 | 1 830 | 3 180 | 2 780 | 872 | 2 820 | 2 720 | 3 020 | 3 180 | 6 |
| 7 | 2 410 | 2 040 | 2 470 | 2 370 | 882 | 2 880 | 2 830 | 1 280 | 3 170 | 3 010 | 3 000 | 3 880 | 7 |
| 8 | 2 820 | 2 440 | 1 810 | 2 110 | 2 340 | 2 180 | 2 020 | 2 000 | 2 870 | 1 480 | 3 130 | 2 980 | 8 |
| 9 | 2 870 | 3 010 | 2 040 | 1 850 | 2 120 | 2 480 | 1 380 | 2 880 | 2 880 | 3 120 | 3 180 | 2 380 | 9 |
| 10 | 2 810 | 1 880 | 1 880 | 2 480 | 3 180 | 1 300 | 2 830 | 2 870 | 2 030 | 2 220 | 3 110 | 2 840 | 10 |
| 11 | 2 280 | 1 270 | 1 810 | 2 270 | 2 200 | 1 040 | 2 830 | 3 180 | 2 880 | 2 870 | 2 410 | 3 700 | 11 |
| 12 | 2 080 | 1 730 | 1 380 | 2 170 | 2 630 | 2 380 | 2 430 | 2 200 | 2 830 | 2 900 | 2 280 | 3 880 | 12 |
| 13 | 1 870 | 2 440 | 2 810 | 2 180 | 3 180 | 2 030 | 2 080 | 1 470 | 2 880 | 3 440 | 2 870 | 3 820 | 13 |
| 14 | 1 420 | 2 280 | 3 150 | 2 270 | 3 800 | 1 800 | 1 830 | 2 270 | 2 810 | 3 000 | 3 050 | 3 800 | 14 |
| 15 | 1 880 | 2 880 | 3 110 | 1 810 | 2 880 | 2 030 | 1 280 | 2 170 | 2 880 | 1 880 | 3 070 | 3 820 | 15 |
| 16 | 3 250 | 2 840 | 3 320 | 1 870 | 3 110 | 1 870 | 1 080 | 2 880 | 2 240 | 3 840 | 3 180 | 2 870 | 16 |
| 17 | 2 390 | 3 180 | 3 180 | 2 880 | 3 010 | 1 810 | 2 300 | 2 880 | 2 380 | 3 100 | 3 880 | 2 710 | 17 |
| 18 | 2 120 | 2 070 | 2 080 | 2 400 | 3 130 | 1 180 | 1 740 | 3 180 | 3 100 | 3 180 | 2 820 | 3 680 | 18 |
| 19 | 2 070 | 1 380 | 1 020 | 1 480 | 3 080 | 2 830 | 1 920 | 2 880 | 2 880 | 2 880 | 1 480 | 3 380 | 19 |
| 20 | 2 430 | 2 180 | 2 130 | 1 730 | 2 410 | 2 310 | 1 780 | 3 000 | 2 840 | 2 880 | 2 280 | 3 700 | 20 |
| 21 | 1 800 | 2 180 | 1 870 | 1 840 | 2 740 | 2 330 | 1 800 | 2 880 | 3 020 | 2 280 | 2 880 | 3 870 | 21 |
| 22 | 1 920 | 2 480 | 2 030 | 1 770 | 3 080 | 2 180 | 1 880 | 3 110 | 3 140 | 1 810 | 3 180 | 3 480 | 22 |
| 23 | 2 840 | 2 840 | 1 480 | 1 420 | 3 230 | 2 130 | 1 870 | 3 070 | 2 880 | 2 820 | 2 880 | 2 220 | 23 |
| 24 | 2 880 | 2 040 | 820 | 2 720 | 2 870 | 1 880 | 2 880 | 3 130 | 2 480 | 2 880 | 2 770 | 1 330 | 24 |
| 25 | 2 880 | 1 880 | 888 | 2 800 | 2 770 | 1 020 | 2 800 | 2 900 | 3 080 | 2 420 | 2 020 | 1 280 | 25 |
| 26 | 2 800 | 1 780 | 781 | 2 880 | 2 880 | 2 440 | 2 880 | 1 770 | 2 880 | 2 480 | 2 770 | 1 930 | 26 |
| 27 | 1 820 | 3 800 | 1 880 | 2 880 | 1 820 | 2 100 | 2 280 | 1 820 | 2 740 | 3 120 | 3 470 | 1 780 | 27 |
| 28 | 1 880 | 2 730 | 2 840 | 2 370 | 1 810 | 2 020 | 1 800 | 2 780 | 2 840 | 2 420 | 3 280 | 2 180 | 28 |
| 29 | 1 800 | | 2 840 | 1 840 | 2 480 | 2 020 | 1 370 | 2 840 | 2 830 | 2 280 | 2 870 | 3 380 | 29 |
| 30 | 2 210 | | 2 780 | 782 | 3 180 | 2 080 | 1 340 | 2 880 | 2 280 | 3 270 | 2 270 | 2 880 | 30 |
| 31 | 2 830 | | 2 370 | | 2 870 | | 2 280 | 2 880 | | 3 210 | | 2 410 | 31 |
| TOTAL | 88 410 | 83 370 | 84 388 | 88 874 | 78 032 | 80 730 | 82 123 | 78 382 | 81 310 | 81 820 | 85 100 | 87 070 | TOTAL |
| MEAN | 2 240 | 2 280 | 2 210 | 1 880 | 2 820 | 2 020 | 2 000 | 2 480 | 2 710 | 2 830 | 2 840 | 2 810 | MEAN |
| MAX | 2 870 | 3 340 | 3 320 | 2 720 | 3 230 | 2 810 | 3 110 | 3 180 | 3 170 | 3 440 | 3 880 | 3 800 | MAX |
| MIN | 1 420 | 1 270 | 781 | 772 | 882 | 1 020 | 787 | 872 | 1 840 | 1 480 | 1 480 | 1 280 | MIN |

### SUMMARY FOR THE YEAR 1988

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 2 380
MAXIMUM DAILY, 3 800 ON DEC 14
MINIMUM DAILY, 882 ON MAY 7

TYPE OF GAUGE - POWER PLANT
LOCATION - LAT 58 33 51 N
LONG 94 32 10 W

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 8 000 000 | JUL | 8 370 000 |
| FEB | 8 480 000 | AUG | 8 880 000 |
| MAR | 8 810 000 | SEP | 7 030 000 |
| APR | 8 180 000 | OCT | 7 040 000 |
| MAY | 8 740 000 | NOV | 7 350 000 |
| JUN | 8 280 000 | DEC | 7 520 000 |

TOTAL DISCHARGE, 78 400 000 dam³

DATA CONTRIBUTED BY -
MANITOBA HYDRO

REGULATED SINCE 1977

REMARKS - FLOW CALCULATED FROM GENERATION AND SPILL TABLES

## NELSON RIVER AT NORWAY HOUSE - STATION NO. 05UB001

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 216.558 | 216.588E | 216.638 | 216.731 | 216.820 | 217.066 | 217.316 | 217.326 | 217.188 | 216.857 | 216.615 | 216.784 | 1 |
| 2 | 216.553 | 216.587A | 216.641 | 216.735 | 216.824 | 217.058 | 217.348 | 217.286 | 217.204 | 216.727 | 216.625 | 216.704 | 2 |
| 3 | 216.552 | 216.586 | 216.644 | 216.734 | 216.827 | 217.018 | 217.288 | 217.286 | 217.223 | 216.654 | 216.587 | 216.740 | 3 |
| 4 | 216.555 | 216.571 | 216.648 | 216.731 | 216.828 | 217.038 | 217.282 | 217.241 | 217.274 | 216.542 | 217.026 | 216.759 | 4 |
| 5 | 216.565 | 216.576 | 216.650 | 216.736 | 216.885 | 217.093 | 217.226 | 217.142 | 217.248 | 216.972 | 216.880 | 216.739 | 5 |
| 6 | 216.585 | 216.575 | 216.648 | 216.737 | 216.922 | 217.064 | 217.167 | 217.182 | 217.176 | 216.703 | 216.888 | 216.727 | 6 |
| 7 | 216.644 | 216.575 | 216.650 | 216.737 | 216.953 | 217.008 | 217.253 | 217.228 | 217.202 | 216.782 | 216.852 | 216.727 | 7 |
| 8 | 216.633 | 216.573 | 216.654 | 216.736 | 216.942 | 217.008 | 217.248 | 217.256 | 217.148 | 216.822 | 216.870 | 216.728 | 8 |
| 9 | 216.642 | 216.581 | 216.657 | 216.740 | 216.986 | 217.114 | 217.248 | 217.260 | 217.148 | 216.882 | 216.882 | 216.714 | 9 |
| 10 | 216.643 | 216.589 | 216.667 | 216.763 | 216.987 | 217.076 | 217.171 | 217.269 | 217.124 | 216.943 | 216.901 | 216.707 | 10 |
| 11 | 216.648A | 216.594 | 216.686 | 216.787 | 217.056 | 217.080 | 217.201 | 217.283 | 217.123 | 216.877 | 216.611 | 216.710 | 11 |
| 12 | 216.644 | 216.595 | 216.695 | 216.782 | 217.084 | 216.608 | 217.227 | 217.286 | 217.202 | 216.857 | 216.774 | 216.708A | 12 |
| 13 | 216.651 | 216.600 | 216.675 | 216.773 | 217.088 | 216.641 | 217.250 | 217.190 | 217.271 | 216.902 | 216.767 | 216.687A | 13 |
| 14 | 216.648 | 216.595 | 216.683 | 216.778 | 217.013 | 217.084 | 217.277 | 217.222 | 217.208 | 216.907 | 216.773 | 216.679 | 14 |
| 15 | 216.641 | 216.593 | 216.686 | 216.786 | 217.030 | 217.133 | 217.278 | 217.283 | 217.223 | 216.889 | 216.780 | 216.676 | 15 |
| 16 | 216.643 | 216.600 | 216.690 | 216.786 | 217.032 | 217.218 | 217.300 | 217.273 | 217.137 | 216.887 | 216.722 | 216.660 | 16 |
| 17 | 216.637A | 216.604 | 216.695 | 216.787 | 217.086 | 217.278 | 217.318 | 217.300 | 217.203 | 216.931 | 216.748 | 216.670 | 17 |
| 18 | 216.647E | 216.614 | 216.698 | 216.801 | 217.087 | 217.216 | 217.288 | 217.283 | 217.092 | 217.014 | 216.739 | 216.688 | 18 |
| 19 | 216.648E | 216.614 | 216.699 | 216.787 | 217.088 | 217.218 | 217.301 | 217.164 | 217.080 | 217.176 | 216.780 | 216.682 | 19 |
| 20 | 216.650E | 216.613 | 216.699 | 216.787 | 217.112 | 217.283 | 217.319 | 217.115 | 217.150 | 217.051 | 216.732 | 216.659 | 20 |
| 21 | 216.661E | 216.617 | 216.697 | 216.800 | 217.113 | 217.224 | 217.318 | 217.236 | 217.153 | 217.060 | 216.731 | 216.661 | 21 |
| 22 | 216.662E | 216.616 | 216.697 | 216.807 | 217.118 | 217.113 | 217.282 | 217.218 | 216.926 | 217.056 | 216.788 | 216.661 | 22 |
| 23 | 216.664E | 216.626 | 216.695 | 216.822 | 217.070 | 217.111 | 217.278 | 217.193 | 216.983 | 217.005 | 216.736 | 216.685 | 23 |
| 24 | 216.658E | 216.629 | 216.704 | 216.838 | 217.086 | 217.114 | 217.328 | 217.288 | 217.122 | 217.004 | 216.761 | 216.654 | 24 |
| 25 | 216.657E | 216.625 | 216.711 | 216.848 | 216.880 | 217.185 | 217.366 | 217.360 | 216.872 | 217.066 | 216.785 | 216.640 | 25 |
| 26 | 216.662E | 216.620 | 216.701 | 216.859 | 216.827 | 217.094 | 217.274 | 217.365 | 216.970 | 216.978 | 216.783 | 216.638 | 26 |
| 27 | 216.660E | 216.630 | 216.700 | 216.883 | 216.947 | 217.112 | 217.188 | 217.277 | 217.160 | 216.723 | 216.773 | 216.636 | 27 |
| 28 | 216.661E | 216.638 | 216.693 | 216.878 | 216.983 | 217.201 | 217.235 | 217.224 | 217.058 | 216.851 | 216.774 | 216.626 | 28 |
| 29 | 216.662E | | 216.692 | 216.870 | 217.033 | 217.272 | 217.267 | 217.130 | 216.947 | 216.814 | 216.767 | 216.627 | 29 |
| 30 | 216.663E | | 216.707 | 216.881 | 217.061 | 217.286 | 217.308 | 217.158 | 216.913 | 216.868 | 216.767 | 216.638 | 30 |
| 31 | 216.664E | | 216.723 | | 217.076 | | 217.320 | 217.178 | | 216.874 | | 216.631 | 31 |
| MEAN | 216.651 | 216.598 | 216.680 | 216.788 | 217.001 | 217.116 | 217.278 | 217.243 | 217.124 | 216.926 | 216.807 | 216.683 | MEAN |
| MAX | 216.664 | 216.638 | 216.723 | 216.881 | 217.118 | 217.278 | 217.362 | 217.365 | 217.274 | 217.176 | 217.026 | 216.784 | MAX |
| MIN | 216.633 | 216.588 | 216.638 | 216.731 | 216.827 | 216.848 | 217.166 | 217.115 | 216.872 | 216.857 | 216.723 | 216.626 | MIN |

WATER LEVELS IN METRES

MEAN, 216.901
MAXIMUM DAILY, 217.362 ON JUL 22
MINIMUM DAILY, 216.633 ON JAN 5
MAXIMUM INSTANTANEOUS,
217.436 AT 17:00 CST ON JUL 25

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 54 00 00 N
LONG 97 48 00 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED SINCE 1973

## METLEY CREEK NEAR MATLOCK - STATION NO. 05UJ003

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.017 | 0.002 | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.019 | 0.002 | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | 0B | 0.1328 | 0.021 | 0.005 | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | 0B | 0.1088 | 0.022 | 0.006 | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | 0B | 0.0328 | 0.011 | 0.010 | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | 0B | 0.0348 | 0.006 | 0.040 | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.0078 | 0.015 | 0.062 | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.0418 | 0.008 | 0.063 | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.0078 | 0.011 | 0.042 | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.0288 | 0.008 | 0.015 | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.0118 | 0.005 | 0.032 | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.0088 | 0.001 | 0.040 | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.0148 | 0.001 | 8.48 | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.1138 | 0.003 | 4.61 | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.1838 | 0.004 | 3.04 | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.1578 | 0.007 | 1.81 | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.0888 | 0.014 | 1.19 | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.0488 | 0.031 | 0.935 | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.0348 | 0.028 | 0.688 | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.0268 | 0.043 | 0.488 | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.0438 | 0.024 | 0.383 | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.2378 | 0.030 | 0.312 | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.308 | 0.014 | 0.228 | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.188 | 0.001 | 0.158 | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.111 | 0.003 | 0.132 | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.057 | 0.027 | 0.178 | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.032 | 0.028 | 0.080 | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.017 | 0.033 | 0.017 | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | 0B | 0.004 | 0.023 | 0.036 | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | 0B | 0.020 | 0.041 | 0.027 | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | 0B | | 0.037 | | --- | --- | | --- | | --- | 31 |
| TOTAL | --- | --- | 0 | 2.077 | 0.887 | 22.003 | --- | --- | --- | --- | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.068 | 0.022 | 0.733 | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.308 | 0.087 | 8.48 | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0.001 | 0.002 | --- | --- | --- | --- | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.203
MAXIMUM DAILY, 8.48 ON JUN 13
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
7.84 AT 05:01 CST ON JUN 13

SUMMARY FOR THE MONTHS MAR TO JUN

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 28 52 N
LONG 97 05 56 W
DRAINAGE AREA, 267 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | --- |
| FEB | --- | AUG | --- |
| MAR | 0 | SEP | --- |
| APR | 178 | OCT | --- |
| MAY | 59.4 | NOV | --- |
| JUN | 1 900 | DEC | --- |

TOTAL DISCHARGE, 2 140 dam³

## HETLEY CREEK NEAR PETERSFIELD - STATION NO. 08GJ008

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.0388 | 0.0408 | 0.038 | 0.034 | 0.237 | 0.088 | 0.080 | 0.018 | --- | --- | 1 |
| 2 | --- | --- | 0.0388 | 0.0408 | 0.063 | 0.038 | 0.211 | 0.087 | 0.082 | 0.018 | --- | --- | 2 |
| 3 | --- | --- | 0.0388 | 0.0408 | 0.088 | 0.034 | 0.228 | 0.078 | 0.048 | 0.017 | --- | --- | 3 |
| 4 | --- | --- | 0.0388 | 1.07 B | 0.088 | 0.047 | 0.204 | 0.082 | 0.048 | 0.030 | --- | --- | 4 |
| 5 | --- | --- | 0.0388 | 2.17 B | 0.082 | 0.088 | 0.218 | 0.041 | 0.040 | 0.072 | --- | --- | 5 |
| 6 | --- | --- | 0.0386 | 2.72 B | 0.080 | 0.078 | 0.178 | 0.088 | 0.047 | 0.040 | --- | --- | 6 |
| 7 | --- | --- | 0.0388 | 3.27 B | 0.088 | 0.093 | 0.188 | 0.084 | 0.038 | 0.007 | --- | --- | 7 |
| 8 | --- | --- | 0.0388 | 3.00 B | 0.078 | 0.070 | 0.182 | 0.070 | 0.085 | 0.002 | --- | --- | 8 |
| 9 | --- | --- | 0.0388 | 2.58 B | 0.038 | 0.041 | 0.142 | 0.070 | 0.083 | 0.008 | --- | --- | 9 |
| 10 | --- | --- | 0.0388 | 2.12 B | 0.034 | 0.082 | 0.122 | 0.083 | 0.093 | 0.007 | --- | --- | 10 |
| 11 | --- | --- | 0.0388 | 1.88 B | 0.043 | 0.182 | 0.108 | 0.084 | 0.078 | 0.011 | --- | --- | 11 |
| 12 | --- | --- | 0.0388 | 1.28 B | 0.055 | 1.81 | 0.108 | 0.070 | 0.085 | 0.008 | --- | --- | 12 |
| 13 | --- | --- | 0.0388 | 1.80 B | 0.040 | 18.5 | 0.088 | 0.083 | 0.084 | 0.014 | --- | --- | 13 |
| 14 | --- | --- | 0.0388 | 3.18 B | 0.038 | 18.4 | 0.083 | 0.030 | 0.087 | 0.007 | --- | --- | 14 |
| 15 | --- | --- | 0.0388 | 2.86 B | 0.043 | 8.00 | 0.070 | 0.035 | 0.038 | 0.017 | --- | --- | 15 |
| 16 | --- | --- | 0.0388 | 2.80 B | 0.040 | 4.81 | 0.058 | 0.028 | 0.038 | 0.008 | --- | --- | 16 |
| 17 | --- | --- | 0.0388 | 1.82 B | 0.084 | 2.88 | 0.084 | 0.009 | 0.036 | 0.018 | --- | --- | 17 |
| 18 | --- | --- | 0.0388 | 1.28 B | 0.070 | 1.78 | 0.078 | 0.028 | 0.088 | 0.008 | --- | --- | 18 |
| 19 | --- | --- | 0.0388 | 1.18 B | 0.058 | 1.23 | 0.088 | 0.082 | 0.088 | 0.018 | --- | --- | 19 |
| 20 | --- | --- | 0.0388 | 1.37 B | 0.085 | 0.852 | 0.048 | 0.028 | 0.030 | 0.021 | --- | --- | 20 |
| 21 | --- | --- | 0.0388 | 1.50 B | 0.052 | 0.571 | 0.084 | 0.021 | 0.031 | 0.018 | --- | --- | 21 |
| 22 | --- | --- | 0.0388 | 1.21 | 0.037 | 0.488 | 0.047 | 0.023 | 0.013 | 0.008 | --- | --- | 22 |
| 23 | --- | --- | 0.0388 | 0.977 | 0.083 | 0.335 | 0.032 | 0.051 | 0.018 | 0.004 | --- | --- | 23 |
| 24 | --- | --- | 0.0388 | 0.873 | 0.088 | 0.336 | 0.053 | 0.048 | 0.009 | 0.001 | --- | --- | 24 |
| 25 | --- | --- | 0.0388 | 0.808 | 0.048 | 0.383 | 0.113 | 0.081 | 0.013 | 0.024 | --- | --- | 25 |
| 26 | --- | --- | 0.0388 | 0.388 | 0.028 | 0.342 | 0.180 | 0.051 | 0.008 | 0.051 | --- | --- | 26 |
| 27 | --- | --- | 0.0388 | 0.207 | 0.034 | 0.348 | 0.188 | 0.081 | 0.018 | 0.088 | --- | --- | 27 |
| 28 | --- | --- | 0.0388 | 0.088 | 0.042 | 0.348 | 0.142 | 0.048 | 0.017 | 0.028 | --- | --- | 28 |
| 29 | --- | --- | 0.0388 | 0.078 | 0.081 | 0.312 | 0.088 | 0.078 | 0.018 | 0.002 | --- | --- | 29 |
| 30 | --- | --- | 0.0388 | 0.080 | 0.082 | 0.278 | 0.083 | 0.084 | 0.022 | 0.002 | --- | --- | 30 |
| 31 | --- | --- | 0.0388 | | 0.043 | | 0.104 | 0.080 | | 0.008A | | --- | 31 |
| TOTAL | --- | --- | 1.208 | 41.214 | 1.888 | 80.331 | 3.743 | 1.888 | 1.418 | 0.842 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.039 | 1.37 | 0.054 | 2.01 | 0.121 | 0.054 | 0.047 | 0.017 | --- | --- | MEAN |
| MAX | --- | --- | 0.039 | 3.27 | 0.088 | 18.5 | 0.237 | 0.093 | 0.088 | 0.072 | --- | --- | MAX |
| MIN | --- | --- | 0.038 | 0.040 | 0.028 | 0.034 | 0.032 | 0.009 | 0.008 | 0.001 | --- | --- | MIN |

SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.458
MAXIMUM DAILY, 18.5 ON JUN 13
MINIMUM DAILY, 0.001 ON OCT 24
MAXIMUM INSTANTANEOUS,
31.8 AT 13:58 CST ON JUN 13

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 18 38 N
LONG 97 02 38 W
DRAINAGE AREA, 845 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 323 |
| FEB | --- | AUG | 164 |
| MAR | 104 | SEP | 122 |
| APR | 3 880 | OCT | 48.8 |
| MAY | 144 | NOV | --- |
| JUN | 5 210 | DEC | --- |

TOTAL DISCHARGE, 9 890 dam³

## NORTH DUCK RIVER AT COWAN - STATION NO. 05LG004

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.0718 | 0.2088 | 0.840 | 0.478 | 1.50 | 0.215 | 1.81 | 0.467 | --- | --- | 1 |
| 2 | --- | --- | 0.0688 | 0.3418 | 0.721 | 0.434 | 0.908 | 0.283 | 1.02 | 0.538 | --- | --- | 2 |
| 3 | --- | --- | 0.0638 | 0.3828 | 0.680 | 0.388 | 0.812 | 0.584 | 0.748 | 0.853 | --- | --- | 3 |
| 4 | --- | --- | 0.0588 | 0.3988 | 0.580 | 0.348 | 0.478 | 0.483 | 0.744 | 0.884 | --- | --- | 4 |
| 5 | --- | --- | 0.0568 | 0.4288 | 0.828 | 0.340 | 0.388 | 1.71 | 0.851 | 0.884 | --- | --- | 5 |
| 6 | --- | --- | 0.0538 | 0.3988 | 0.827 | 0.332 | 0.308 | 1.81 | 0.587 | 0.838 | --- | --- | 6 |
| 7 | --- | --- | 0.0538 | 0.3898 | 0.818 | 0.482 | 0.256 | 0.881 | 0.531 | 0.853 | --- | --- | 7 |
| 8 | --- | --- | 0.0528 | 0.3388 | 0.583 | 0.483 | 0.224 | 0.709 | 0.515 | 0.713 | --- | --- | 8 |
| 9 | --- | --- | 0.0528 | 0.2788 | 0.870 | 0.438 | 0.246 | 0.881 | 1.18 | 0.708 | --- | --- | 9 |
| 10 | --- | --- | 0.0528 | 0.2538 | 0.884 | 0.383 | 0.243 | 0.478 | 1.38 | 0.777 | --- | --- | 10 |
| 11 | --- | --- | 0.0528 | 0.2588 | 0.887 | 0.847 | 0.257 | 0.434 | 1.01 | 0.842 | --- | --- | 11 |
| 12 | --- | --- | 0.0488 | 0.3308 | 0.626 | 2.35 | 0.271 | 0.538 | 0.873 | 0.843 | --- | --- | 12 |
| 13 | --- | --- | 0.0488 | 0.4788 | 0.588 | 7.58 | 0.284 | 0.601 | 0.488 | 0.857 | --- | --- | 13 |
| 14 | --- | --- | 0.0488 | 0.6358 | 0.530 | 5.09 | 0.232 | 0.788 | 0.381 | 0.878 | --- | --- | 14 |
| 15 | --- | --- | 0.0438 | 0.8808 | 0.508 | 3.19 | 0.207 | 0.818 | 0.303 | 1.02 | --- | --- | 15 |
| 16 | --- | --- | 0.0488 | 0.8848 | 0.483 | 1.88 | 0.187 | 0.881 | 0.280 | 1.23 | --- | --- | 16 |
| 17 | --- | --- | 0.0538 | 0.7828 | 0.473 | 1.28 | 0.171 | 0.881 | 0.288 | 1.28 | --- | --- | 17 |
| 18 | --- | --- | 0.0628 | 0.7858 | 0.488 | 0.880 | 0.187 | 0.802 | 0.288 | 1.37 | --- | --- | 18 |
| 19 | --- | --- | 0.0738 | 0.7388 | 0.462 | 0.762 | 0.141 | 0.804 | 0.344 | 1.48 | --- | --- | 19 |
| 20 | --- | --- | 0.0858 | 0.628 | 0.570 | 0.581 | 0.122 | 0.852 | 0.421 | 1.84 | --- | --- | 20 |
| 21 | --- | --- | 0.1008 | 1.01 | 0.628 | 0.510 | 0.098 | 0.771 | 0.422 | 1.84 | --- | --- | 21 |
| 22 | --- | --- | 0.1148 | 1.87 | 0.553 | 0.483 | 0.088 | 0.844 | 0.488 | 1.98 | --- | --- | 22 |
| 23 | --- | --- | 0.1368 | 3.01 | 0.515 | 0.428 | 0.080 | 0.840 | 0.488 | 1.58 | --- | --- | 23 |
| 24 | --- | --- | 0.1588 | 2.82 | 0.507 | 0.433 | 0.078 | 0.888 | 0.478 | 1.87 | --- | --- | 24 |
| 25 | --- | --- | 0.1888 | 1.98 | 0.571 | 0.507 | 0.087 | 1.03 | 0.410 | 1.98 | --- | --- | 25 |
| 26 | --- | --- | 0.2048 | 1.42 | 1.88 | 3.84 | 0.073 | 1.18 | 0.402 | 1.83 | --- | --- | 26 |
| 27 | --- | --- | 0.1908 | 1.23 | 1.31 | 18.3 | 0.088 | 1.08 | 0.388 | 2.01 | --- | --- | 27 |
| 28 | --- | --- | 0.1318 | 1.03 | 0.953 | 11.4 | 0.071 | 1.10 | 0.434 | 2.84 | --- | --- | 28 |
| 30 | --- | --- | 0.1348 | 0.803 | 0.742 | 8.28 | 0.118 | 8.41 | 0.438 | 2.84 | --- | --- | 29 |
| 31 | --- | --- | 0.1388 | 0.714 | 0.613 | 2.82 | 0.143 | 4.11 | 0.447 | 2.47 | --- | --- | 30 |
| | --- | --- | 0.1438 | | 0.837 | | 0.183 | 2.88 | | 2.31 | | --- | 31 |
| TOTAL | --- | --- | 2.788 | 28.702 | 30.473 | 73.341 | 5.228 | 33.848 | 17.788 | 43.805 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.088 | 0.857 | 0.880 | 2.44 | 0.288 | 1.09 | 0.582 | 1.41 | --- | --- | MEAN |
| MAX | --- | --- | 0.204 | 3.01 | 1.88 | 18.3 | 1.50 | 8.41 | 1.81 | 3.84 | --- | --- | MAX |
| MIN | --- | --- | 0.043 | 0.208 | 0.452 | 0.332 | 0.088 | 0.218 | 0.288 | 0.487 | --- | --- | MIN |

SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.821
MAXIMUM DAILY, 18.3 ON JUN 27
MINIMUM DAILY, 0.0438 ON MAR 15
MAXIMUM INSTANTANEOUS,
31.8 AT 14:58 CST ON JUN 27

TYPE OF GAUGE - RECORDING
LOCATION - LAT 52 01 50 N
LONG 100 38 00 W
DRAINAGE AREA, 333 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 711 |
| FEB | --- | AUG | 2 810 |
| MAR | 238 | SEP | 1 630 |
| APR | 2 320 | OCT | 3 780 |
| MAY | 1 770 | NOV | --- |
| JUN | 6 340 | DEC | --- |

TOTAL DISCHARGE, 18 800 dam³

REMARKS - PREVIOUS TO 1986 PUBLISHED UNDER THE NAME "DUCK RIVER AT COWAN"

## NORTH MOOSE LAKE AT MOOSE LAKE NARROWS CONTROL STRUCTURE - STATION NO. 05KK005

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 255.622 | 255.601 | 255.607 | 255.604 | 255.598 | 255.601A | 255.484 | 255.383 | 255.318 | --- | 255.430 | 255.437 | 1 |
| 2 | 255.622 | 255.603 | 255.607 | 255.604 | 255.598 | 255.570 | 255.478 | 255.382 | 255.310 | --- | 255.386 | 255.434 | 2 |
| 3 | 255.620 | 255.603 | 255.608 | 255.602 | 255.596 | 255.508 | 255.488 | 255.346 | 255.284 | --- | 255.391 | 255.438 | 3 |
| 4 | 255.622 | 255.603 | 255.610 | 255.601 | 255.597 | 255.526 | 255.458 | 255.411 | 255.338 | --- | 255.394 | 255.438 | 4 |
| 5 | 255.623 | 255.608 | 255.611 | 255.601 | 255.598 | 255.554 | 255.511 | 255.481A | 255.331 | --- | 255.394 | 255.434 | 5 |
| 6 | 255.626 | 255.608 | 255.613 | 255.600 | 255.592 | 255.551 | 255.477 | 255.388E | 255.327 | --- | 255.388 | 255.433 | 6 |
| 7 | 255.624 | 255.608 | 255.611 | 255.600 | 255.598 | 255.521 | 255.482 | 255.342E | 255.321 | --- | 255.388 | 255.430 | 7 |
| 8 | 255.622 | 255.604 | 255.610 | 255.597 | 255.593 | 255.493 | 255.468 | 255.327E | 255.352 | --- | 255.401 | 255.433 | 8 |
| 9 | 255.622 | 255.608 | 255.614 | 255.598 | 255.597 | 255.509 | 255.498 | 255.319A | 255.426 | --- | 255.404 | 255.434 | 9 |
| 10 | 255.620 | 255.608 | 255.613 | 255.598 | 255.590 | 255.506 | 255.478 | 255.321 | 255.398 | --- | 255.404 | 255.434 | 10 |
| 11 | 255.618 | 255.608 | 255.610 | 255.594 | 255.584 | 255.506 | 255.448 | 255.310 | 255.384 | --- | 255.408 | 255.433 | 11 |
| 12 | 255.620 | 255.612 | 255.607 | 255.581 | 255.574 | 255.599 | 255.462 | 255.338 | 255.324 | --- | 255.408 | 255.434 | 12 |
| 13 | 255.621 | 255.611 | 255.608 | 255.582 | 255.581 | 255.493 | 255.464 | 255.327 | 255.381 | --- | 255.408 | 255.434 | 13 |
| 14 | 255.618 | 255.608 | 255.609 | 255.586 | 255.602 | 255.486 | 255.483 | 255.283 | 255.362A | --- | 255.408 | 255.433 | 14 |
| 15 | 255.613 | 255.608 | 255.607 | 255.582 | 255.627 | 255.442 | 255.442 | 255.282 | --- | --- | 255.408 | 255.433 | 15 |
| 16 | 255.618 | 255.605 | 255.608 | 255.584 | 255.589 | 255.381 | 255.435 | 255.273 | --- | --- | 255.408 | 255.433 | 16 |
| 17 | 255.614 | 255.604 | 255.607 | 255.578 | 255.571 | 255.487 | 255.440 | 255.288 | --- | --- | 255.414 | 255.438 | 17 |
| 18 | 255.615 | 255.603 | 255.607 | 255.578 | 255.590 | 255.483 | 255.431 | 255.302 | --- | --- | 255.418 | 255.438 | 18 |
| 19 | 255.618 | 255.608 | 255.608 | 255.578 | 255.580 | 255.494 | 255.421 | 255.384 | --- | --- | 255.421 | 255.438 | 19 |
| 20 | 255.618 | 255.608 | 255.607 | 255.580 | 255.548 | 255.443 | 255.428 | 255.280 | --- | --- | 255.430 | 255.436 | 20 |
| 21 | 255.617 | 255.605 | 255.605 | 255.581 | 255.588 | 255.478 | 255.388 | 255.256 | --- | --- | 255.418 | 255.437 | 21 |
| 22 | 255.614 | 255.603 | 255.607 | 255.586 | 255.637 | 255.488 | 255.342 | 255.280 | --- | --- | 255.421 | 255.435 | 22 |
| 23 | 255.605 | 255.607 | 255.608 | 255.589 | 255.615 | 255.435 | 255.413 | 255.277 | --- | --- | 255.418 | 255.441 | 23 |
| 24 | 255.602 | 255.611 | 255.607 | 255.602 | 255.584 | 255.482 | 255.388 | 255.287 | --- | 255.333A | 255.423 | 255.444 | 24 |
| 25 | 255.605 | 255.611 | 255.608 | 255.602 | 255.768 | 255.484 | 255.378 | 255.388 | --- | --- | 255.428 | 255.447 | 25 |
| 26 | 255.606 | 255.607 | 255.609 | 255.600 | 255.581 | 255.525 | 255.434 | 255.384 | --- | 255.378A | 255.427 | 255.457 | 26 |
| 27 | 255.605 | 255.611 | 255.608 | 255.598 | 255.583 | 255.486 | 255.377 | 255.337 | --- | 255.502 | 255.427 | 255.480 | 27 |
| 28 | 255.604 | 255.610 | 255.607 | 255.600 | 255.588 | 255.450 | 255.388 | 255.350 | --- | 255.478 | 255.428 | 255.480 | 28 |
| 29 | 255.608 | | 255.603 | 255.594 | 255.595 | 255.487 | 255.388 | 255.374 | --- | 255.421 | 255.434 | 255.457 | 29 |
| 30 | 255.606 | | 255.600 | 255.595 | 255.598A | 255.470 | 255.374 | 255.333 | --- | 255.382 | 255.435 | 255.462 | 30 |
| 31 | 255.605 | | 255.601 | | 255.580E | | 255.347 | 255.321 | | 255.433 | | 255.461 | 31 |
| MEAN | 255.615 | 255.607 | 255.608 | 255.594 | 255.593 | 255.489 | 255.430 | 255.328 | --- | --- | 255.412 | 255.440 | MEAN |
| MAX | 255.626 | 255.612 | 255.614 | 255.604 | 255.768 | 255.606 | 255.511 | 255.481 | --- | --- | 255.435 | 255.462 | MAX |
| MIN | 255.602 | 255.601 | 255.600 | 255.578 | 255.548 | 255.381 | 255.342 | 255.266 | --- | --- | 255.388 | 255.430 | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MAXIMUM DAILY, 255.768 ON MAY 25
MINIMUM DAILY, 255.266 ON AUG 31
MAXIMUM INSTANTANEOUS,
255.881 AT 15:45 CST ON MAY 26

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

TYPE OF GAUGE - RECORDING
LOCATION - LAT 53 57 00 N
LONG 100 10 00 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED SINCE 1984

DRAINAGE AREA,
6 330 km²

## NORTH PINE RIVER NEAR PINE RIVER - STATION NO. 05LG001

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.0528 | 0.0788 | 0.425 | 0.474 | 4.32 | 0.381 | 1.11 | 0.388 | --- | --- | 1 |
| 2 | --- | --- | 0.0508 | 0.1288 | 0.372 | 0.442 | 3.10 | 0.371 | 0.821 | 0.386 | --- | --- | 2 |
| 3 | --- | --- | 0.0488 | 0.1818 | 0.344 | 0.401 | 2.32 | 0.551 | 0.780 | 0.388 | --- | --- | 3 |
| 4 | --- | --- | 0.0448 | 0.1828 | 0.318 | 0.381 | 1.78 | 0.523 | 0.717 | 0.382 | --- | --- | 4 |
| 5 | --- | --- | 0.0408 | 0.2128 | 0.330 | 0.400 | 1.41 | 0.588 | 0.631 | 0.408 | --- | --- | 5 |
| 6 | --- | --- | 0.0408 | 0.2188 | 0.314 | 0.408 | 1.17 | 0.788 | 0.587 | 0.427 | --- | --- | 6 |
| 7 | --- | --- | 0.0428 | 0.2188 | 0.368 | 0.695 | 1.02 | 0.711 | 0.555 | 0.412 | --- | --- | 7 |
| 8 | --- | --- | 0.0448 | 0.1868 | 0.332 | 0.610 | 0.948 | 0.611 | 0.580 | 0.393 | --- | --- | 8 |
| 9 | --- | --- | 0.0428 | 0.1238 | 0.340 | 0.838 | 1.00 | 0.530 | 0.588 | 0.386 | --- | --- | 9 |
| 10 | --- | --- | 0.0428 | 0.1348 | 0.383 | 0.480 | 0.882 | 0.484 | 0.630 | 0.388 | --- | --- | 10 |
| 11 | --- | --- | 0.0408 | 0.1178 | 0.338 | 0.888 | 0.880 | 0.411 | 0.618 | 0.382 | --- | --- | 11 |
| 12 | --- | --- | 0.0398 | 0.1388 | 0.323 | 3.44 | 1.08 | 0.437 | 0.582 | 0.373 | --- | --- | 12 |
| 13 | --- | --- | 0.0418 | 0.2288 | 0.318 | 7.58 | 0.887 | 0.572 | 0.559 | 0.382 | --- | --- | 13 |
| 14 | --- | --- | 0.0488 | 0.2888 | 0.288 | 8.27 | 0.803 | 0.505 | 0.536 | 0.384 | --- | --- | 14 |
| 15 | --- | --- | 0.0488 | 0.4288 | 0.250 | 4.80 | 0.734 | 0.443 | 0.483 | 0.430 | --- | --- | 15 |
| 16 | --- | --- | 0.0448 | 0.4448 | 0.238 | 3.67 | 0.784 | 0.402 | 0.418 | 0.412 | --- | --- | 16 |
| 17 | --- | --- | 0.0428 | 0.3188 | 0.251 | 2.83 | 0.681 | 0.388 | 0.417 | 0.384 | --- | --- | 17 |
| 18 | --- | --- | 0.0418 | 0.3128 | 0.327 | 2.27 | 0.553 | 0.405 | 0.427 | 0.405 | --- | --- | 18 |
| 19 | --- | --- | 0.0458 | 0.3128 | 0.378 | 1.80 | 0.828 | 0.402 | 0.484 | 0.402 | --- | --- | 19 |
| 20 | --- | --- | 0.0488 | 0.3878 | 0.532 | 1.80 | 0.874 | 0.387 | 0.481 | 0.411 | --- | --- | 20 |
| 21 | --- | --- | 0.0588 | 0.5138 | 0.844 | 1.41 | 0.844 | 0.405 | 0.483 | 0.412 | --- | --- | 21 |
| 22 | --- | --- | 0.0888 | 0.7708 | 0.511 | 1.27 | 0.811 | 0.388 | 0.487 | 0.438 | --- | --- | 22 |
| 23 | --- | --- | 0.0888 | 1.18 | 0.448 | 1.11 | 0.498 | 0.411 | 0.478 | 0.448 | --- | --- | 23 |
| 24 | --- | --- | 0.0718 | 1.11 | 0.448 | 1.22 | 0.481 | 0.438 | 0.480 | 0.424 | --- | --- | 24 |
| 25 | --- | --- | 0.0768 | 0.951 | 0.804 | 1.30 | 0.480 | 0.500 | 0.432 | 0.388 | --- | --- | 25 |
| 26 | --- | --- | 0.0708 | 0.881 | 1.09 | 4.61 | 0.463 | 0.512 | 0.420 | 0.408 | --- | --- | 26 |
| 27 | --- | --- | 0.0898 | 0.743 | 0.972 | 13.8 | 0.448 | 0.525 | 0.411 | 1.11 | --- | --- | 27 |
| 28 | --- | --- | 0.0528 | 0.884 | 0.878 | 11.1 | 0.481 | 0.554 | 0.401 | 3.08 | --- | --- | 28 |
| 29 | --- | | 0.0428 | 0.841 | 0.736 | 7.88 | 0.488 | 1.24 | 0.378 | 1.77 | --- | --- | 29 |
| 30 | --- | | 0.0488 | 0.431 | 0.828 | 8.41 | 0.447 | 1.32 | 0.372 | 1.82 | --- | --- | 30 |
| 31 | --- | | 0.0528 | | 0.849 | | 0.413 | 1.32 | | 1.47 | | --- | 31 |
| TOTAL | --- | --- | 1.553 | 12.288 | 14.430 | 80.158 | 30.918 | 17.485 | 15.428 | 18.456 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.050 | 0.409 | 0.485 | 3.01 | 0.887 | 0.584 | 0.548 | 0.595 | --- | --- | MEAN |
| MAX | --- | --- | 0.078 | 1.18 | 1.09 | 13.8 | 4.32 | 1.32 | 1.11 | 3.08 | --- | --- | MAX |
| MIN | --- | --- | 0.038 | 0.078 | 0.238 | 0.381 | 0.413 | 0.371 | 0.372 | 0.382 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.823
MAXIMUM DAILY, 13.8 ON JUN 27
MINIMUM DAILY, 0.0388 ON MAR 12
MAXIMUM INSTANTANEOUS,
14.7 AT 08:44 CST ON JUN 27

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 48 00 N
LONG 100 32 00 W
DRAINAGE AREA, 310 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 3 870 |
| FEB | --- | AUG | 1 510 |
| MAR | 134 | SEP | 1 420 |
| APR | 1 060 | OCT | 1 580 |
| MAY | 1 250 | NOV | --- |
| JUN | 7 780 | DEC | --- |

TOTAL DISCHARGE, 17 400 dam³

## NORTH SEAL RIVER BELOW STONY LAKE - STATION NO. 06EB001

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 60.38 | 53.08 | 44.38 | 36.78 | 32.28 | 318 | 402 | 214 | 138 | 130 | 157 B | 87.18 | 1 |
| 2 | 60.38 | 52.78 | 43.98 | 36.98 | 32.18 | 339 | 388 | 208 | 138 | 131 | 168 B | 86.38 | 2 |
| 3 | 60.08 | 52.68 | 43.78 | 36.38 | 32.18 | 384 | 381 | 203 | 135 | 131 | 188 B | 85.38 | 3 |
| 4 | 59.88 | 52.18 | 43.38 | 36.28 | 33.08 | 370 | 383 | 201 | 134 | 132 | 194 B | 84.38 | 4 |
| 5 | 59.88 | 51.78 | 43.18 | 36.98 | 31.98 | 384 | 378 | 198 | 138 | 133 | 182 B | 83.48 | 5 |
| 6 | 59.58 | 51.48 | 42.78 | 36.68 | 31.88 | 387 | 370 | 197 | 136 | 133 | 180 B | 82.48 | 6 |
| 7 | 59.38 | 51.28 | 42.58 | 36.58 | 31.68 | 408 | 361 | 192 | 134 | 133 | 147 B | 81.48 | 7 |
| 8 | 58.18 | 50.88 | 42.18 | 36.48 | 31.88 | 419 | 353 | 187 | 133 | 133 | 144 B | 80.58 | 8 |
| 9 | 58.98 | 50.58 | 41.98 | 36.28 | 31.98 | 426 | 344 | 184 | 131 | 133 | 139 B | 79.78 | 9 |
| 10 | 58.78 | 50.18 | 41.88 | 36.08 | 32.38 | 436 | 339 | 180 | 131 | 134 | 136 B | 78.88 | 10 |
| 11 | 58.48 | 49.88 | 41.48 | 34.88 | 34.28 | 446 | 331 | 176 | 132 | 134 | 130 B | 78.28 | 11 |
| 12 | 58.38 | 49.58 | 41.18 | 34.68 | 38.78 | 460 | 323 | 176 | 131 | 139 | 126 B | 77.48 | 12 |
| 13 | 58.18 | 49.18 | 41.08 | 34.58 | 48.28 | 485 | 317 | 175 | 130 | 142 | 121 B | 76.78 | 13 |
| 14 | 57.78 | 48.88 | 40.68 | 34.38 | 64.88 | 458 | 311 | 173 | 129 | 143 | 118 B | 76.08 | 14 |
| 15 | 57.58 | 48.58 | 40.88 | 34.18 | 82.68 | 480 | 302 | 168 | 132 | 143 | 115 B | 75.48 | 15 |
| 16 | 57.38 | 48.38 | 40.48 | 34.08 | 78.18 | 481 | 298 | 166 | 132 | 143 | 112 B | 74.78 | 16 |
| 17 | 57.08 | 47.98 | 40.28 | 33.78 | 88.48 | 481 | 292 | 164 | 131 | 148 | 110 B | 74.08 | 17 |
| 18 | 56.88 | 47.78 | 40.08 | 33.68 | 108 | 482 | 287 | 163 | 133 | 148 | 107 B | 73.58 | 18 |
| 19 | 56.58 | 47.38 | 39.78 | 33.58 | 115 | 484 | 280 | 161 | 131 | 148 | 105 B | 72.18 | 19 |
| 20 | 56.38 | 47.18 | 39.58 | 33.38 | 122 | 480 | 278 | 158 | 134 | 148 | 103 B | 72.28 | 20 |
| 21 | 56.08 | 46.78 | 39.38 | 33.28 | 131 | 482 | 268 | 156 | 131 | 148 | 101 B | 71.68 | 21 |
| 22 | 55.78 | 46.68 | 39.18 | 33.18 | 141 | 457 | 264 | 152 | 130 | 161 | 99.58 | 71.18 | 22 |
| 23 | 55.68 | 46.28 | 38.88 | 33.08 | 152 | 480 | 258 | 148 | 130 | 152 | 97.58 | 70.68 | 23 |
| 24 | 55.38 | 46.08 | 38.68 | 32.88 | 165 | 446 | 251 | 147 | 130 | 154 | 95.98 | 70.08 | 24 |
| 25 | 55.18 | 45.88 | 38.38 | 32.78 | 178 | 442 | 240 | 148 | 130 | 154 | 94.38 | 69.78 | 25 |
| 26 | 54.88 | 45.48 | 38.18 | 32.68 | 194 | 434 | 240 | 148 | 128 | 155 | 93.18 | 69.08 | 26 |
| 27 | 54.68 | 45.18 | 37.88 | 32.58 | 222 | 427 | 236 | 146 | 128 | 152 | 91.78 | 68.48 | 27 |
| 28 | 54.38 | 44.88 | 37.68 | 32.48 | 238 | 421 | 233 | 146 | 133 | 152 | 90.38 | 68.08 | 28 |
| 29 | 54.18 | | 37.48 | 32.38 | 264 | 417 | 228 | 143 | 132 | 156 | 88.28 | 67.58 | 29 |
| 30 | 53.88 | | 37.18 | 32.28 | 276 | 411 | 225 | 142 | 131 | 159 | 88.28 | 67.28 | 30 |
| 31 | 53.38 | | 37.08 | | 297 | | 220 | 140 | | 183 | | 66.88 | 31 |
| TOTAL | 1 772.1 | 1 386.5 | 1 253.0 | 1 026.6 | 3 311.6 | 12 783 | 9 406 | 5 267 | 3 864 | 4 457 | 3 877.7 | 2 340.2 | TOTAL |
| MEAN | 57.2 | 48.8 | 40.4 | 34.2 | 107 | 426 | 303 | 170 | 132 | 144 | 118 | 75.5 | MEAN |
| MAX | 60.3 | 53.0 | 44.3 | 36.7 | 297 | 484 | 402 | 214 | 138 | 183 | 187 | 87.1 | MAX |
| MIN | 53.3 | 44.8 | 37.0 | 32.2 | 31.8 | 318 | 220 | 140 | 128 | 130 | 88.2 | 66.8 | MIN |

### SUMMARY FOR THE YEAR 1989

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 138
MAXIMUM DAILY, 484 ON JUN 19
MINIMUM DAILY, 31.80 ON MAY 7
MAXIMUM INSTANTANEOUS,
484 AT 18:15 CST ON JUN 18

TYPE OF GAUGE - RECORDING
LOCATION - LAT 56 50 40 N
LONG 98 17 20 W
DRAINAGE AREA, 18 400 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 153 000 | JUL | 813 000 |
| FEB | 116 000 | AUG | 455 000 |
| MAR | 108 000 | SEP | 342 000 |
| APR | 88 800 | OCT | 385 000 |
| MAY | 285 000 | NOV | 308 000 |
| JUN | 1 110 000 | DEC | 202 000 |

TOTAL DISCHARGE, 4 370 000 dam³

## NORTH SHANNON CREEK NEAR MYRTLE - STATION NO. 05DF015

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.017 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.015 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0.013 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 0.007 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 B | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.0028 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.0288 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.6818 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 8.72 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 3.76 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 1.86 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.8888 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.8388 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.293 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.111 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.067 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.078 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.064 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.058 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.048 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.034 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.024 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.020 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.019 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 14.880 | 0.053 | 0 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.500 | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 8.72 | 0.017 | 0 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.081
MAXIMUM DAILY, 8.720 ON APR 15
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
8.308 AT 06:31 CST ON APR 15

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 20 34 N
LONG 97 50 33 W
DRAINAGE AREA, 168 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 1 300 | OCT | 0 |
| MAY | 4.86 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, 1 300 dam³

REMARKS - PREVIOUS TO 1988 PUBLISHED UNDER THE NAME "SHANNON CREEK TRIBUTARY NEAR MYRTLE"

## NORTH SHOAL LAKE NEAR INWOOD - STATION NO. 05LN004

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 28.301 | 28.229 | 28.291 | 28.241 | 28.248 | 28.258 | 28.121 | --- | 1 |
| 2 | --- | --- | --- | --- | 28.283 | 28.267 | 28.325 | 28.226 | 28.231 | 28.180 | 28.092 | --- | 2 |
| 3 | --- | --- | --- | --- | 28.303 | 28.288 | 28.337 | 28.256 | 28.181 | 28.122 | 28.088 | --- | 3 |
| 4 | --- | --- | --- | --- | 28.485 | 28.265 | 28.305 | 28.262 | 28.243 | 28.108 | 28.080 | --- | 4 |
| 5 | --- | --- | --- | --- | 28.483 | 28.254 | 28.361 | 28.354 | 28.223 | 28.198 | 28.092 | --- | 5 |
| 6 | --- | --- | --- | --- | 28.307 | 28.236 | 28.368 | 28.288 | 28.232 | 28.278 | 28.088 | --- | 6 |
| 7 | --- | --- | --- | --- | 28.274 | 28.280 | 28.318 | 28.268 | 28.221 | 28.198 | 28.108 | --- | 7 |
| 8 | --- | --- | --- | --- | 28.268 | 28.244 | 28.328 | 28.284 | 28.247 | 28.188 | 28.105 | --- | 8 |
| 9 | --- | --- | --- | --- | 28.289 | 28.215 | 28.382 | 28.248 | 28.281 | 28.180 | 28.103 | --- | 9 |
| 10 | --- | --- | --- | --- | 28.267 | 28.187 | 28.388 | 28.240 | 28.208 | 28.130 | 28.104 | --- | 10 |
| 11 | --- | --- | --- | --- | 28.248 | 28.175 | 28.328 | 28.241 | 28.239 | 28.115 | 28.158 | --- | 11 |
| 12 | --- | --- | --- | --- | 28.247 | 28.415 | 28.381 | 28.243 | 28.211 | 28.134 | 28.202 | --- | 12 |
| 13 | --- | --- | --- | --- | 28.268 | 28.462 | 28.332 | 28.258 | 28.185 | 28.113 | 28.128 | --- | 13 |
| 14 | --- | --- | --- | --- | 28.267 | 28.388 | 28.331 | 28.263 | 28.203 | 28.108 | 28.117 | --- | 14 |
| 15 | --- | --- | --- | --- | 28.268 | 28.389 | 28.324 | 28.238 | 28.194 | 28.189 | 28.131 | --- | 15 |
| 16 | --- | --- | --- | --- | 28.248 | 28.308 | 28.318 | 28.233 | 28.213 | 28.128 | 28.108 | --- | 16 |
| 17 | --- | --- | --- | --- | 28.247 | 28.328 | 28.314 | 28.185 | 28.188 | 28.141 | 28.098 | --- | 17 |
| 18 | --- | --- | --- | --- | 28.247 | 28.388 | 28.328 | 28.174 | 28.192 | 28.102 | 28.100 | --- | 18 |
| 19 | --- | --- | --- | --- | 28.281 | 28.382 | 28.321 | 28.305 | 28.152 | 28.081 | 28.117 | --- | 19 |
| 20 | --- | --- | --- | 28.303A | 28.282 | 28.321 | 28.310 | 28.310 | 28.143 | 28.107 | 28.142A | --- | 20 |
| 21 | --- | --- | --- | 28.295 | 28.257 | 28.378 | 28.281 | 28.280 | 28.157 | 28.093 | --- | --- | 21 |
| 22 | --- | --- | --- | 28.291 | 28.258 | 28.363 | 28.349 | 28.261 | 28.303 | 28.088 | --- | --- | 22 |
| 23 | --- | --- | --- | 28.292 | 28.252 | 28.384 | 28.237 | 28.225 | 28.145 | 28.100 | --- | --- | 23 |
| 24 | --- | --- | --- | 28.305 | 28.258 | 28.333 | 28.248 | 28.228 | 28.172 | 28.092 | --- | --- | 24 |
| 25 | --- | --- | --- | 28.304 | 28.282 | 28.333 | 28.281 | 28.187 | 28.208 | 28.083 | --- | --- | 25 |
| 26 | --- | --- | --- | 28.311 | 28.307 | 28.328 | 28.301 | 28.248 | 28.123 | 28.098 | --- | --- | 26 |
| 27 | --- | --- | --- | 28.316 | 28.243 | 28.380 | 28.283 | 28.198 | 28.111 | 28.088 | --- | --- | 27 |
| 28 | --- | --- | --- | 28.333 | 28.296 | 28.318 | 28.231 | 28.187 | 28.184 | 28.111 | --- | --- | 28 |
| 29 | --- | | --- | 28.339 | 28.287 | 28.334 | 28.242 | 28.307 | 28.129 | 28.123 | --- | --- | 29 |
| 30 | --- | | --- | 28.312 | 28.243 | 28.343 | 28.267 | 28.234 | 28.123 | 28.116 | --- | --- | 30 |
| 31 | --- | | --- | | 28.234 | | 28.240 | 28.268 | | 28.118 | | --- | 31 |
| MEAN | --- | --- | --- | --- | 28.281 | 28.312 | 28.304 | 28.247 | 28.185 | 28.134 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 28.483 | 28.462 | 28.388 | 28.354 | 28.303 | 28.278 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 28.234 | 28.175 | 28.231 | 28.187 | 28.111 | 28.088 | --- | --- | MIN |

WATER LEVELS IN METRES

MAXIMUM DAILY, 28.483 ON MAY 5

MAXIMUM INSTANTANEOUS,
28.786 AT 10:23 CST ON MAY 5

WATER LEVELS ARE REFERRED TO ASSUMED DATUM

### SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 28 00 N
LONG 97 37 30 W

A - MANUAL GAUGE

DRAINAGE AREA,
848 km²

## NORTH SNAKE CREEK NEAR BIRNIE - STATION NO. 05LL017

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.046 | 0.012 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.043 | 0.007 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0.2778 | 0.064 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0.2388 | 0.055 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0.2038 | 0.052 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0.1148 | 0.041 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.1048 | 0.037 | 0.023 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.0818 | 0.036 | 0.028 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.0698 | 0.034 | 0.041 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.0438 | 0.031 | 0.020 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.0588 | 0.030 | 0.027 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.044 | 0.054 | 0.413 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.058 | 0.027 | 1.54 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.188 | 0.023 | 0.893 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.311 | 0.028 | 0.541 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.323 | 0.021 | 0.388 | 0A | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.263A | 0.028 | 0.155 | 0A | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.183 | 0.026 | 0.074 | 0A | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.096 | 0.031 | 0.024 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.071 | 0.034 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.088 | 0.026 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.108 | 0.019 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.187 | 0.018 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.141 | 0.024 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.092 | 0.037 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.082 | 0.048 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.088 | 0.080 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.061 | 0.058 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.063 | 0.034 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.080 | 0.026 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0.017 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 3.806 | 1.130 | 4.271 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.120 | 0.036 | 0.142 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.323 | 0.080 | 1.54 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0.017 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.037
MAXIMUM DAILY, 1.54 ON JUN 13
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
1.78 AT 17:03 CST ON JUN 13

REMARKS - PRIOR TO 1988 PUBLISHED AS "BIRNIE CREEK"

### SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 28 50 N
LONG 98 27 00 W
DRAINAGE AREA, 82.9 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 312 | OCT | 0 |
| MAY | 97.5 | NOV | --- |
| JUN | 369 | DEC | --- |

TOTAL DISCHARGE, 778 dam³

## NUTIMIK LAKE AT NUTIMIK LAKE - STATION NO. 05PF802

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | --- | 275.047E | 275.388 | 275.741 | 274.811 | --- | 274.327 | --- | 1 |
| 2 | --- | --- | --- | --- | 274.881 | 275.044 | 275.478 | 275.674E | 274.818 | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | --- | 275.038 | 275.488 | 275.808E | --- | --- | --- | --- | 3 |
| 4 | --- | --- | --- | --- | --- | 275.014 | 275.553 | 275.541 | --- | 274.628 | --- | --- | 4 |
| 5 | --- | --- | --- | --- | --- | 275.014 | 275.808E | 275.491 | --- | --- | --- | --- | 5 |
| 6 | --- | --- | --- | --- | --- | 275.017 | 275.888E | 275.371 | --- | --- | --- | --- | 6 |
| 7 | --- | --- | --- | --- | --- | 275.013E | 275.722 | 275.301 | --- | --- | --- | --- | 7 |
| 8 | --- | --- | --- | --- | --- | 275.008E | 275.782 | 275.251 | --- | --- | --- | --- | 8 |
| 9 | --- | --- | --- | --- | --- | 275.005 | 275.808 | 275.181E | --- | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | --- | 275.008 | 275.831 | 275.071E | --- | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | --- | 275.002 | 275.848 | 274.881 | --- | --- | --- | --- | 11 |
| 12 | --- | --- | --- | --- | --- | 275.005 | 275.848E | 274.801 | --- | --- | --- | --- | 12 |
| 13 | --- | --- | --- | --- | --- | 275.150E | 275.850E | 274.811 | --- | --- | --- | --- | 13 |
| 14 | --- | --- | --- | --- | --- | 275.208E | 275.851 | 274.801 | 274.884 | --- | --- | --- | 14 |
| 15 | --- | --- | --- | --- | --- | 275.250 | 275.918 | 274.781 | --- | --- | --- | --- | 15 |
| 16 | --- | --- | --- | --- | --- | 275.235 | 275.845 | 274.728E | --- | --- | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 274.888 | 275.204 | 275.845 | 274.671 | --- | --- | --- | --- | 17 |
| 18 | --- | --- | --- | --- | 274.883E | 275.154 | 275.838 | 274.678 | --- | --- | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 274.880E | 275.084 | 275.861E | 274.678 | --- | --- | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 274.868E | 275.088E | 275.888E | 274.821 | --- | --- | --- | --- | 20 |
| 21 | --- | --- | --- | --- | 274.853 | 275.078E | 275.848 | 274.771 | 274.881 | --- | --- | --- | 21 |
| 22 | --- | --- | --- | --- | 274.853 | 275.080E | 275.848 | 274.771 | --- | --- | --- | --- | 22 |
| 23 | --- | --- | --- | --- | 274.853 | 275.102 | 275.891 | 274.748E | --- | 274.389 | --- | --- | 23 |
| 24 | --- | --- | --- | --- | 274.868E | 275.152 | 275.891 | 274.724E | --- | --- | --- | --- | 24 |
| 25 | --- | --- | --- | --- | 274.920E | 275.191 | 275.891 | 274.701 | --- | --- | --- | --- | 25 |
| 26 | --- | --- | --- | --- | 274.853 | 275.151 | 275.878E | 274.721 | --- | --- | --- | --- | 26 |
| 27 | --- | --- | --- | --- | 274.888 | 275.171 | 275.884E | 274.721 | --- | --- | --- | --- | 27 |
| 28 | --- | --- | --- | --- | 275.023 | 275.214E | 275.851 | 274.687 | --- | --- | --- | --- | 28 |
| 29 | --- | | --- | --- | 275.044 | 275.287E | 275.821 | 274.858 | --- | --- | --- | --- | 29 |
| 30 | --- | | --- | --- | 275.054 | 275.300 | 275.841 | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | --- | | 275.051E | | 275.751 | --- | | --- | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | 275.111 | 275.782 | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | 275.300 | 275.945 | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | 275.002 | 275.389 | --- | --- | --- | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 50 08 39 N
LONG 95 41 21 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED

DRAINAGE AREA,
127 000 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## OAK CREEK NEAR GLENBORO - STATION NO. 05MG027

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0.050B | 0.101 | 0 | 0.011 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0.500B | 0.081 | 0 | 0.004 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 1.13 B | 0.050 | 0 | 0.002 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0.839B | 0.055 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0.588B | 0.047 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 1.26 B | 0.025 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 1.26 B | 0.020 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 1.21 B | 0.018 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 1.11 B | 0.011 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 1.28 B | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 1.28 | 0.004 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 1.12 | 0.004 | 0.883 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 1.17 | 0.004 | 3.22 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 1.42 | 0.003 | 2.73 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 1.22 | 0.001 | 1.78 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 1.08 | 0 | 1.14 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.883 | 0 | 0.818 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.823 | 0 | 0.808 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.704 | 0 | 0.408 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.817 | 0 | 0.288 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.857 | 0 | 0.197 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.491 | 0.001 | 0.148 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.400 | 0.139 | 0.101 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.358 | 0.001 | 0.081 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.337 | 0 | 0.039 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.293 | 0 | 0.038 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.246 | 0 | 0.011 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.193 | 0 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.157 | 0 | 0.018 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.121 | 0 | 0.021 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | 0 | 0 | | 0 | --- | --- | 31 |
| TOTAL | --- | --- | 0 | 22.770 | 0.572 | 12.204 | 0.017 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.758 | 0.018 | 0.407 | 0.001 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 1.42 | 0.139 | 3.22 | 0.011 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.050 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.148
MAXIMUM DAILY, 3.22 ON JUN 13
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
3.52 AT 07:54 CST ON JUN 13

### SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 29 22 N
LONG 99 10 16 W
DRAINAGE AREA, 486 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 1.47 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 1 970 | OCT | 0 |
| MAY | 48.4 | NOV | --- |
| JUN | 1 060 | DEC | --- |

TOTAL DISCHARGE, 3 070 dam³

## OAK CREEK NEAR STOCKTON - STATION NO. 05NE010

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 08 | 08 | 08 | 0.1308 | 0.011 | 0.002 | 0 | 0 | 0 | 0 | 08 | 08 | 1 |
| 2 | 08 | 08 | 08 | 4.32 B | 0.008 | 0.002 | 0 | 0 | 0 | 0 | 08 | 08 | 2 |
| 3 | 08 | 08 | 08 | 9.46 B | 0.003 | 0.002 | 0 | 0 | 0 | 0 | 08 | 08 | 3 |
| 4 | 08 | 08 | 08 | 9.38 B | 0.003 | 0.003 | 0 | 0 | 0 | 0 | 08 | 08 | 4 |
| 5 | 08 | 08 | 08 | 8.01 | 0.002 | 0.002 | 0 | 0 | 0 | 0 | 08 | 08 | 5 |
| 6 | 08 | 08 | 08 | 3.82 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | 08 | 08 | 6 |
| 7 | 08 | 08 | 08 | 1.07 | 0.003 | 0.001 | 0 | 0 | 0 | 0 | 08 | 08 | 7 |
| 8 | 08 | 08 | 08 | 0.648 | 0.005 | 0.001 | 0 | 0 | 0 | 0 | 08 | 08 | 8 |
| 9 | 08 | 08 | 08 | 0.509 | 0.003 | 0.001 | 0 | 0 | 0 | 0 | 08 | 08 | 9 |
| 10 | 08 | 08 | 08 | 0.420 | 0.004 | 0.001 | 0 | 0 | 0 | 0 | 08 | 08 | 10 |
| 11 | 08 | 08 | 08 | 0.343 | 0.004 | 0.001 | 0 | 0 | 0 | 0 | 08 | 08 | 11 |
| 12 | 08 | 08 | 08 | 0.318 | 0.005 | 0.001 | 0 | 0 | 0 | 0 | 08 | 08 | 12 |
| 13 | 08 | 08 | 08 | 0.321 | 0.005 | 0.001 | 0 | 0 | 0 | 0 | 08 | 08 | 13 |
| 14 | 08 | 08 | 08 | 0.314 | 0.005 | 0.002 | 0 | 0 | 0 | 0 | 08 | 08 | 14 |
| 15 | 08 | 08 | 08 | 0.288 | 0.005 | 0.002 | 0 | 0 | 0 | 0 | 08 | 08 | 15 |
| 16 | 08 | 08 | 08 | 0.237 | 0.005 | 0.001 | 0 | 0 | 0 | 0 | 08 | 08 | 16 |
| 17 | 08 | 08 | 08 | 0.194 | 0.008 | 0.001 | 0 | 0 | 0 | 0 | 08 | 08 | 17 |
| 18 | 08 | 08 | 08 | 0.158 | 0.004 | 0.001 | 0 | 0 | 0 | 0 | 08 | 08 | 18 |
| 19 | 08 | 08 | 08 | 0.135 | 0.004 | 0.001 | 0 | 0 | 0 | 0 | 08 | 08 | 19 |
| 20 | 08 | 08 | 08 | 0.131 | 0.006 | 0.001 | 0 | 0 | 0 | 0 | 08 | 08 | 20 |
| 21 | 08 | 08 | 08 | 0.118 | 0.008 | 0.001 | 0 | 0 | 0 | 0 | 08 | 08 | 21 |
| 22 | 08 | 08 | 08 | 0.110 | 0.004 | 0.001 | 0 | 0 | 0 | 0 | 08 | 07 | 22 |
| 23 | 08 | 08 | 08 | 0.107 | 0.005 | 0.001 | 0 | 0 | 0 | 0 | 08 | 08 | 23 |
| 24 | 08 | 08 | 08 | 0.094 | 0.004 | 0.001 | 0 | 0 | 0 | 0 | 08 | 08 | 24 |
| 25 | 08 | 08 | 08 | 0.089 | 0.005 | 0.001 | 0 | 0 | 0 | 0 | 08 | 08 | 25 |
| 26 | 08 | 08 | 08 | 0.067 | 0.007 | 0.001 | 0 | 0 | 0 | 0 | 08 | 08 | 26 |
| 27 | 08 | 08 | 08 | 0.045 | 0.007 | 0.001 | 0 | 0 | 0 | 0 | 08 | 08 | 27 |
| 28 | 08 | 08 | 08 | 0.028 | 0.007 | 0.001 | 0 | 0 | 0 | 0 | 08 | 08 | 28 |
| 29 | 08 | | 08 | 0.015 | 0.005 | 0.001 | 0 | 0 | 0 | 0 | 08 | 08 | 29 |
| 30 | 08 | | 08 | 0.010 | 0.003 | 0 | 0 | 0 | 0 | 0 | 08 | 08 | 30 |
| 31 | 08 | | 08 | | 0.002 | | 0 | 0 | | 0 | | 08 | 31 |
| TOTAL | 0 | 0 | 0 | 40.894 | 0.150 | 0.036 | 0 | 0 | 0 | 0 | 0 | 0 | TOTAL |
| MEAN | 0 | 0 | 0 | 1.36 | 0.005 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | MEAN |
| MAX | 0 | 0 | 0 | 9.46 | 0.011 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | MAX |
| MIN | 0 | 0 | 0 | 0.010 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.113
MAXIMUM DAILY, 9.460 ON APR 3
MINIMUM DAILY, 08 ON JAN 1
MAXIMUM INSTANTANEOUS,
11.58 AT 20:41 CST ON APR 3

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 33 44 N
LONG 99 30 49 W
DRAINAGE AREA, 1 030 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 0 | JUL | 0 |
| FEB | 0 | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 3 530 | OCT | 0 |
| MAY | 13.0 | NOV | 0 |
| JUN | 3.11 | DEC | 0 |

TOTAL DISCHARGE, 3 550 dam³

## OAK LAKE AT OAK LAKE RESORT - STATION NO. 05NE006

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 428.283E | 428.388 | 428.782 | 428.689 | 428.628E | 428.482 | 428.418 | 428.323 | --- | --- | 1 |
| 2 | --- | --- | 428.287E | 428.442 | 428.788 | 428.670 | 428.614E | 428.474 | 428.420 | 428.342 | --- | --- | 2 |
| 3 | --- | --- | 428.284E | 428.600 | 428.784 | 428.689 | 428.608E | 428.474 | 428.420 | 428.342 | --- | --- | 3 |
| 4 | --- | --- | 428.287E | 428.692 | 428.770 | 428.686 | 428.601E | 428.473 | 428.431 | 428.341 | --- | --- | 4 |
| 5 | --- | --- | 428.300E | 428.738 | 428.784 | 428.682 | 428.598E | 428.433 | 428.418 | 428.343 | --- | --- | 5 |
| 6 | --- | --- | 428.288E | 428.778 | 428.777 | 428.638 | 428.592E | 428.440 | 428.423 | 428.338 | --- | --- | 6 |
| 7 | --- | --- | 428.286E | 428.786 | 428.785 | 428.648 | 428.589E | 428.436 | 428.431 | 428.336 | --- | --- | 7 |
| 8 | --- | --- | 428.295E | 428.768 | 428.788 | 428.655 | 428.587E | 428.432 | 428.426 | 428.338 | --- | --- | 8 |
| 9 | --- | --- | 428.288E | 428.768 | 428.788 | 428.655 | 428.586E | 428.428 | 428.423A | 428.333 | --- | --- | 9 |
| 10 | --- | --- | 428.301A | 428.780 | 428.770 | 428.641 | 428.588A | 428.421 | 428.417E | 428.328 | --- | --- | 10 |
| 11 | --- | --- | 428.301 | 428.781 | 428.773 | 428.643 | 428.588 | 428.433 | 428.414E | 428.364 | --- | --- | 11 |
| 12 | --- | --- | 428.305 | 428.782 | 428.780 | 428.615 | 428.581 | 428.432 | 428.408E | 428.330 | --- | --- | 12 |
| 13 | --- | --- | 428.302 | 428.785 | 428.743 | 428.630 | 428.576 | 428.425 | 428.402A | 428.320 | --- | --- | 13 |
| 14 | --- | --- | 428.302 | 428.785 | 428.748 | 428.656 | 428.574 | 428.436 | 428.408 | 428.314 | --- | --- | 14 |
| 15 | --- | --- | 428.295 | 428.788 | 428.743 | 428.658 | 428.573 | 428.433 | 428.404 | 428.307 | --- | --- | 15 |
| 16 | --- | --- | 428.308 | 428.784 | 428.741 | 428.688A | 428.570 | 428.428 | 428.381 | 428.315 | --- | --- | 16 |
| 17 | --- | --- | 428.328 | 428.782 | 428.747 | 428.671E | 428.588 | 428.423 | 428.387 | 428.308 | --- | --- | 17 |
| 18 | --- | --- | 428.350 | 428.781 | 428.747 | 428.675E | 428.568 | 428.447 | 428.377 | 428.328 | --- | --- | 18 |
| 19 | --- | --- | 428.389 | 428.780 | 428.788 | 428.688E | 428.557 | 428.428 | 428.384 | 428.344 | --- | --- | 19 |
| 20 | --- | --- | 428.378 | 428.780 | 428.788 | 428.682E | 428.567 | 428.434 | 428.391 | 428.308 | --- | --- | 20 |
| 21 | --- | --- | 428.388 | 428.780 | 428.734 | 428.655E | 428.652 | 428.438 | 428.390 | 428.307 | --- | --- | 21 |
| 22 | --- | --- | 428.383 | 428.780 | 428.714 | 428.652E | 428.561 | 428.442 | 428.370 | 428.307 | --- | --- | 22 |
| 23 | --- | --- | 428.311 | 428.784 | 428.701 | 428.648E | 428.538 | 428.440 | 428.402 | 428.302 | --- | --- | 23 |
| 24 | --- | --- | 428.303 | 428.788 | 428.703 | 428.638E | 428.528 | 428.429A | 428.383 | 428.304 | --- | --- | 24 |
| 25 | --- | --- | 428.391 | 428.804 | 428.703 | 428.638E | 428.518 | 428.420E | 428.388 | 428.288 | --- | --- | 25 |
| 26 | --- | --- | 428.385 | 428.788 | 428.711A | 428.637E | 428.510 | 428.418E | 428.373 | 428.288 | --- | --- | 26 |
| 27 | --- | --- | 428.371 | 428.779 | 428.688E | 428.640E | 428.495 | 428.410E | 428.370 | 428.314 | --- | --- | 27 |
| 28 | --- | --- | 428.380 | 428.782 | 428.667E | 428.648E | 428.492 | 428.408E | 428.383 | 428.288 | --- | --- | 28 |
| 29 | --- | | 428.347 | 428.775 | 428.677A | 428.658E | 428.493 | 428.408E | 428.380 | 428.288 | --- | --- | 29 |
| 30 | --- | | 428.340 | 428.780 | 428.668 | 428.638E | 428.483 | 428.410A | 428.388 | 428.284A | --- | --- | 30 |
| 31 | --- | | 428.348 | | 428.687 | | 428.480 | 428.418 | | 428.282E | | --- | 31 |
| MEAN | --- | --- | 428.333 | 428.747 | 428.701 | 428.663 | 428.589 | 428.434 | 428.388 | 428.318 | --- | --- | MEAN |
| MAX | --- | --- | 428.378 | 428.804 | 428.782 | 428.688 | 428.628 | 428.482 | 428.444 | 428.381 | --- | --- | MAX |
| MIN | --- | --- | 428.283 | 428.388 | 428.677 | 428.618 | 428.480 | 428.408 | 428.388 | 428.288 | --- | --- | MIN |

WATER LEVELS IN METRES

### SUMMARY FOR THE YEAR 1988

MAXIMUM DAILY, 428.804 ON APR 25
MINIMUM DAILY, 428.288 ON OCT 25
MAXIMUM INSTANTANEOUS,
428.848 AT 08:31 CST ON MAY 20

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 41 40 N
LONG 100 42 30 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED

DRAINAGE AREA,
4 770 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1988 ADJ.)

## OAK RIVER AT SHOAL LAKE - STATION NO. 05MD004

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0 | B | 0.0488 | 0.007 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0 | B | 0.1148 | 0.004 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0 | B | 0.1068 | 0.004 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0 | B | 0.089 | 0.007 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0 | B | 0.118 | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0 | B | 0.121 | 0.007 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0 | B | 0.108 | 0.007 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0 | B | 0.092 | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0 | B | 0.088 | 0.007 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0 | B | 0.084 | 0.007 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0 | B | 0.078 | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0 | B | 0.074 | 0.005 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0 | B | 0.077 | 0.004 | 0 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0 | B | 0.073 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0 | B | 0.087 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0 | B | 0.088 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0 | B | 0.082 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0 | B | 0.080 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0 | B | 0.081 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0 | B | 0.082 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0 | B | 0.081 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0 | B | 0.044 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0 | B | 0.041 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0 | B | 0.052 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0 | B | 0.043 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0 | B | 0.035 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0 | B | 0.019 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0 | B | 0.017 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0 | B | 0.013 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0 | B | 0.011 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0.0138 | | | 0 | | 0 | 0 | | 0 | --- | --- | 31 |
| TOTAL | --- | --- | 0.013 | | 1.939 | 0.085 | 0 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | | 0.065 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0.013 | | 0.121 | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | | 0.011 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.008
MAXIMUM DAILY, 0.121 ON APR 6
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
0.177 AT 16:33 CST ON APR 6

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 26 33 N
LONG 100 35 16 W
DRAINAGE AREA, 372 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 1.12 | SEP | 0 |
| APR | 185 | OCT | 0 |
| MAY | 7.34 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, 178 dam³

## OAK RIVER NEAR RIVERS - STATION NO. 05MD004

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0.0038 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0.0108 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0.0288 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0.0208 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0.014A | 0 | | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0.007 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.005 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.005 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.004 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.005 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.005 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.008 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.012 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.013 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.012 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.010 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.008 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.007 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.008 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.004 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | 0 | 0 | | 0 | --- | --- | 31 |
| TOTAL | --- | --- | 0 | 0.198 | 0.004 | 0 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.007 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.028 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.001
MAXIMUM DAILY, 0.028B ON APR 3
MINIMUM DAILY, 0B ON MAR 1

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 01 30 N
LONG 100 33 35 W
DRAINAGE AREA, 1 180 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 17.1 | OCT | 0 |
| MAY | 0.35 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, 17.5 dam³

## OCHRE RIVER AT OCHRE RIVER - STATION NO. 08LJ005

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.0118 | 0.0548 | 0.878 | 0.600 | 0.678 | 0.108 | 0.858 | 0.218 | --- | --- | 1 |
| 2 | --- | --- | 0.0888 | 0.1858 | 0.613 | 0.588 | 0.647 | 0.097 | 0.488 | 0.232 | --- | --- | 2 |
| 3 | --- | --- | 0.1018 | 0.4248 | 0.782 | 0.553 | 0.603 | 0.118 | 0.388 | 0.435 | --- | --- | 3 |
| 4 | --- | --- | 0.1198 | 0.4088 | 0.727 | 0.488 | 0.434 | 0.148 | 0.413 | 0.284 | --- | --- | 4 |
| 5 | --- | --- | 0.1018 | 0.4218 | 0.781 | 0.447 | 0.383 | 0.138 | 0.400 | 0.288 | --- | --- | 5 |
| 6 | --- | --- | 0.0808 | 0.3638 | 0.748 | 0.433 | 0.358 | 0.148 | 0.388 | 0.287 | --- | --- | 6 |
| 7 | --- | --- | 0.0238 | 0.4428 | 0.888 | 0.788 | 0.328 | 0.147 | 0.487 | 0.328 | --- | --- | 7 |
| 8 | --- | --- | 0.0138 | 0.3858 | 0.648 | 1.34 | 0.310 | 0.118 | 0.884 | 0.321 | --- | --- | 8 |
| 9 | --- | --- | 0.0028 | 0.5588 | 0.826 | 0.887 | 1.58 | 0.085 | 0.880 | 0.282 | --- | --- | 9 |
| 10 | --- | --- | 0.0128 | 0.7658 | 0.801 | 0.788 | 1.24 | 0.070 | 0.831 | 0.288 | --- | --- | 10 |
| 11 | --- | --- | 0.0068 | 0.4848 | 0.588 | 0.678 | 1.00 | 0.088 | 0.488 | 0.308 | --- | --- | 11 |
| 12 | --- | --- | 0.0038 | 0.4458 | 0.583 | 1.30 | 1.48 | 0.084 | 0.471 | 0.285 | --- | --- | 12 |
| 13 | --- | --- | 0.0228 | 0.2328 | 0.527 | 20.2 | 1.88 | 0.278 | 0.418 | 0.281 | --- | --- | 13 |
| 14 | --- | --- | 0.0138 | 0.4878 | 0.487 | 11.7 | 1.44 | 0.804 | 0.388 | 0.288 | --- | --- | 14 |
| 15 | --- | --- | 0.0038 | 0.5718 | 0.487 | 7.88 | 1.09 | 0.478 | 0.321 | 0.318 | --- | --- | 15 |
| 16 | --- | --- | 0.0018 | 0.8228 | 0.456 | 5.20 | 0.890 | 0.317 | 0.291 | 0.388 | --- | --- | 16 |
| 17 | --- | --- | 0.0038 | 0.8298 | 0.433 | 4.07 | 0.761 | 0.227 | 0.288 | 0.372 | --- | --- | 17 |
| 18 | --- | --- | 0.0028 | 1.18 B | 0.484 | 4.28 | 0.818 | 0.187 | 0.238 | 0.348 | --- | --- | 18 |
| 19 | --- | --- | 0.0038 | 1.28 B | 0.888 | 3.26 | 0.830 | 0.204 | 0.241 | 0.328 | --- | --- | 19 |
| 20 | --- | --- | 0.0078 | 1.42 B | 0.873 | 2.51 | 0.444 | 0.249 | 0.272 | 0.328 | --- | --- | 20 |
| 21 | --- | --- | 0.0178 | 1.58 B | 0.826 | 2.02 | 0.383 | 0.222 | 0.243 | 0.314 | --- | --- | 21 |
| 22 | --- | --- | 0.0338 | 1.74 B | 0.486 | 1.72 | 0.293 | 0.208 | 0.232 | 0.313 | --- | --- | 22 |
| 23 | --- | --- | 0.0508 | 2.04 | 0.413 | 1.61 | 0.238 | 0.198 | 0.212 | 0.320 | --- | --- | 23 |
| 24 | --- | --- | 0.0438 | 2.02 | 0.384 | 1.31 | 0.215 | 0.178 | 0.208 | 0.321 | --- | --- | 24 |
| 25 | --- | --- | 0.0488 | 1.74 | 0.882 | 1.14 | 0.182 | 0.188 | 0.207 | 0.311 | --- | --- | 25 |
| 26 | --- | --- | 0.0728 | 1.46 | 1.38 | 1.02 | 0.187 | 0.227A | 0.208 | 0.303 | --- | --- | 26 |
| 27 | --- | --- | 0.0588 | 1.26 | 1.46 | 1.05 | 0.134 | 0.2628 | 0.210 | 0.381 | --- | --- | 27 |
| 28 | --- | --- | 0.0378 | 1.14 | 1.08 | 0.928 | 0.114 | 0.2668 | 0.204 | 0.577 | --- | --- | 28 |
| 29 | --- | --- | 0.0488 | 1.02 | 0.907 | 0.888 | 0.110 | 0.3138 | 0.192 | 0.886 | --- | --- | 29 |
| 30 | --- | --- | 0.0088 | 0.958 | 0.780 | 0.782 | 0.113 | 0.895 | 0.208 | 0.585 | --- | --- | 30 |
| 31 | --- | | 0.0088 | | 0.883 | | 0.110 | 0.722 | | 0.478 | | --- | 31 |
| TOTAL | --- | --- | 1.007 | 28.881 | 31.048 | 80.112 | 19.231 | 7.708 | 10.333 | 10.881 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.032 | 0.886 | 0.878 | 2.87 | 0.620 | 0.248 | 0.344 | 0.344 | --- | --- | MEAN |
| MAX | --- | --- | 0.118 | 2.04 | 1.46 | 20.2 | 1.88 | 0.885 | 0.884 | 0.888 | --- | --- | MAX |
| MIN | --- | --- | 0.001 | 0.084 | 0.384 | 0.433 | 0.110 | 0.084 | 0.182 | 0.210 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.721
MAXIMUM DAILY, 20.2 ON JUN 13
MINIMUM DAILY, 0.0018 ON MAR 18
MAXIMUM INSTANTANEOUS,
26.4 AT 12:00 CST ON JUN 13

### SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 03 04 N
LONG 99 47 15 W
DRAINAGE AREA, 342 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL 1 | 880 |
| FEB | --- | AUG | 888 |
| MAR | 87.0 | SEP | 893 |
| APR 2 | 300 | OCT | 921 |
| MAY 1 | 820 | NOV | --- |
| JUN 8 | 920 | DEC | --- |

TOTAL DISCHARGE, 15 300 dam³

## ODEI RIVER NEAR THOMPSON - STATION NO. 05TE003

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.418 | 2.278 | 1.488 | 1.188 | 2.328 | 81.7A | 82.8E | 21.8 | 17.0 | 22.8 | 12.6 | 8.308 | 1 |
| 2 | 3.388 | 2.248 | 1.488 | 1.188 | 7.388 | 77.3A | 81.8E | 21.0 | 18.2 | 21.3 | 11.5 | 8.208 | 2 |
| 3 | 3.358 | 2.208 | 1.458 | 1.188 | 13.0 B | 76.8E | 48.8E | 20.3 | 18.8 | 20.4 | 12.2 B | 8.088 | 3 |
| 4 | 3.278 | 2.198 | 1.428 | 1.158 | 24.8 B | 76.0E | 46.8E | 22.8 | 15.2 | 19.9 | 11.8 B | 7.908 | 4 |
| 5 | 3.248 | 2.158 | 1.408 | 1.158 | 36.5 B | 74.0E | 47.0E | 24.0 | 14.7 | 20.2 | 11.8 B | 7.788 | 5 |
| 6 | 3.208 | 2.128 | 1.388 | 1.148 | 50.3 B | 73.0E | 45.8E | 25.8 | 14.3 | 20.2 | 11.8 B | 7.228 | 6 |
| 7 | 3.178 | 2.108 | 1.368 | 1.148 | 70.7 B | 72.8E | 44.8E | 27.3 | 14.3 | 20.0 | 11.8 B | 6.718 | 7 |
| 8 | 3.138 | 2.088 | 1.378 | 1.138 | 83.6 B | 72.2E | 43.0E | 27.8 | 14.2 | 20.4 | 11.8 B | 6.178 | 8 |
| 9 | 3.098 | 2.068 | 1.388 | 1.138 | 101 B | 71.8E | 41.8E | 27.0 | 13.8 | 20.0 | 11.7 B | 5.788 | 9 |
| 10 | 3.038 | 2.008 | 1.368 | 1.138 | 118 B | 71.6E | 39.0A | 26.3 | 13.7 | 19.3 | 11.7 B | 5.488 | 10 |
| 11 | 2.988 | 1.968 | 1.348 | 1.138 | 140 B | 71.5E | 38.8E | 25.2 | 14.0 | 18.3 | 11.7 B | 5.068 | 11 |
| 12 | 2.938 | 1.958 | 1.338 | 1.128 | 153 E | 71.4E | 37.0E | 24.1 | 14.7 | 19.2 | 11.6 B | 4.848 | 12 |
| 13 | 2.898 | 1.928 | 1.328 | 1.128 | 180 E | 71.3E | 35.8A | 22.8 | 15.7 | 18.7 | 11.4 B | 4.328 | 13 |
| 14 | 2.838 | 1.908 | 1.318 | 1.128 | 189 E | 71.0E | 34.4 | 21.7 | 16.3 | 18.8 | 11.3 B | 3.888 | 14 |
| 15 | 2.818 | 1.888 | 1.308 | 1.118 | 188 E | 70.0E | 33.2 | 20.8 | 16.8 | 18.7 | 11.2 B | 3.598 | 15 |
| 16 | 2.788 | 1.868 | 1.308 | 1.118 | 185 A | 69.5E | 32.1 | 19.8 | 17.0 | 18.0 | 11.0 B | 3.318 | 16 |
| 17 | 2.758 | 1.828 | 1.288 | 1.118 | 168 | 68.2E | 31.3 | 18.7 | 17.2 | 17.4 | 10.7 B | 3.038 | 17 |
| 18 | 2.718 | 1.808 | 1.288 | 1.108 | 160 | 67.3E | 30.3 | 18.0 | 16.0 | 16.8 | 10.4 B | 2.828 | 18 |
| 19 | 2.868 | 1.788 | 1.288 | 1.108 | 138 | 66.0E | 30.2 | 17.3 | 16.4 | 16.1 | 10.0 B | 2.618 | 19 |
| 20 | 2.678 | 1.768 | 1.288 | 1.108 | 144 | 65.0E | 28.2 | 16.3 | 16.4 | 16.3 | 9.828 | 2.408 | 20 |
| 21 | 2.648 | 1.728 | 1.268 | 1.118 | 148 | 64.0E | 26.5 | 15.8 | 20.3 | 16.3 | 9.638 | 2.258 | 21 |
| 22 | 2.648 | 1.888 | 1.268 | 1.118 | 147 | 63.0E | 27.8 | 15.1 | 21.2 | 16.4 | 9.378 | 2.108 | 22 |
| 23 | 2.648 | 1.858 | 1.248 | 1.138 | 148 | 62.0E | 26.8 | 14.7 | 21.4 | 15.8 | 9.218 | 1.858 | 23 |
| 24 | 2.538 | 1.828 | 1.248 | 1.148 | 140 | 61.0E | 25.7 | 14.5 | 22.8 | 15.8 | 8.858 | 1.698 | 24 |
| 25 | 2.518 | 1.808 | 1.238 | 1.148 | 132 | 59.8E | 25.3 | 15.0 | 23.0 | 15.8 | 8.898 | 1.788 | 25 |
| 26 | 2.478 | 1.688 | 1.228 | 1.158 | 123 | 58.8E | 24.7 | 15.7 | 22.8 | 15.4 | 8.788 | 1.688 | 26 |
| 27 | 2.438 | 1.678 | 1.218 | 1.188 | 116 A | 57.8E | 24.0 | 16.5 | 23.4 | 15.4 | 8.638 | 1.588 | 27 |
| 28 | 2.388 | 1.638 | 1.218 | 1.238 | 108 A | 56.0E | 23.6 | 17.3 | 23.3 | 17.3 | 8.538 | 1.508 | 28 |
| 29 | 2.368 | | 1.208 | 1.328 | 102 A | 55.0E | 23.0 | 17.8 | 22.5 | 16.8 | 8.478 | 1.468 | 29 |
| 30 | 2.328 | | 1.208 | 1.448 | 92.4 A | 53.5E | 22.8 | 17.8 | 22.8 | 16.2 | 8.398 | 1.408 | 30 |
| 31 | 2.288 | | 1.188 | | 86.8 A | | 21.7 | 17.4 | | 13.9 | | 1.388 | 31 |
| TOTAL | 87.38 | 53.00 | 40.88 | 34.87 | 3 338.78 | 2 026.8 | 1 086.3 | 626.3 | 540.3 | 557.4 | 318.74 | 138.25 | TOTAL |
| MEAN | 2.82 | 1.89 | 1.31 | 1.18 | 108 | 67.8 | 34.5 | 20.2 | 18.0 | 18.0 | 10.8 | 4.87 | MEAN |
| MAX | 3.41 | 2.27 | 1.48 | 1.44 | 180 | 81.7 | 82.8 | 27.8 | 23.4 | 22.8 | 12.8 | 8.30 | MAX |
| MIN | 2.38 | 1.63 | 1.18 | 1.10 | 2.32 | 53.8 | 21.7 | 14.8 | 13.8 | 13.8 | 8.38 | 1.38 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 24.2
MAXIMUM DAILY, 180E ON MAY 13
MINIMUM DAILY, 1.10B ON APR 18

### SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 55 59 45 N
LONG 97 21 33 W
DRAINAGE AREA, 8 130 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 7 550 | JUL | 83 300 |
| FEB | 4 880 | AUG | 64 000 |
| MAR | 3 500 | SEP | 48 700 |
| APR | 3 880 | OCT | 48 200 |
| MAY | 288 000 | NOV | 27 400 |
| JUN | 176 000 | DEC | 10 900 |

TOTAL DISCHARGE, 781 000 dam³

## OTTER LAKE NEAR BROAD VALLEY - STATION NO. 05QD001

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 273.683 | 273.677 | 273.788 | 273.663 | 273.648 | 273.631 | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 273.677 | 273.659 | 273.756 | 273.643 | 273.646 | 273.643 | --- | --- | 2 |
| 3 | --- | --- | --- | --- | 273.677 | 273.648 | 273.750 | 273.646 | 273.649 | 273.648 | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 273.686 | 273.682 | 273.750 | 273.648 | 273.648 | 273.648 | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 273.689 | 273.648 | 273.736 | 273.625 | 273.648 | 273.643 | --- | --- | 5 |
| 6 | --- | --- | --- | --- | 273.680 | 273.698 | 273.732 | 273.622 | 273.587 | 273.637 | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 273.680 | 273.698 | 273.728 | 273.622 | 273.586 | 273.648 | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 273.680 | 273.674 | 273.723 | 273.618 | 273.604 | 273.648 | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 273.686 | 273.671 | 273.720 | 273.613 | 273.598 | 273.643 | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 273.682 | 273.686 | 273.713 | 273.607 | 273.598 | 273.648 | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 273.704 | 273.685 | 273.707 | 273.601 | 273.588 | 273.640A | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 273.692 | 273.736 | 273.704 | 273.698 | 273.582 | --- | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 273.677 | 273.780 | 273.704 | 273.685 | 273.585 | --- | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 273.677 | 273.783 | 273.688 | 273.588 | 273.588 | --- | --- | --- | 14 |
| 15 | --- | --- | 273.686A | --- | 273.674 | 273.786 | 273.686 | 273.585 | 273.585 | --- | --- | --- | 15 |
| 16 | --- | --- | --- | --- | 273.677 | 273.788 | 273.686 | 273.582 | 273.573 | --- | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 273.674 | 273.780 | 273.686 | 273.582 | 273.582 | --- | --- | --- | 17 |
| 18 | --- | --- | --- | --- | 273.671 | 273.780 | 273.683 | 273.578 | 273.587 | --- | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 273.671 | 273.787 | 273.683 | 273.584 | 273.587 | --- | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 273.683 | 273.787 | 273.677 | 273.584 | 273.587 | --- | --- | --- | 20 |
| 21 | --- | --- | --- | 273.728A | 273.677 | 273.788 | 273.674 | 273.587 | 273.570 | --- | --- | --- | 21 |
| 22 | --- | --- | --- | --- | 273.671 | 273.786 | 273.686 | 273.581 | 273.552 | --- | --- | --- | 22 |
| 23 | --- | --- | --- | --- | 273.662 | 273.786 | 273.682 | 273.581 | 273.570 | --- | --- | --- | 23 |
| 24 | --- | --- | --- | --- | 273.659 | 273.765 | 273.653 | 273.587 | 273.564 | --- | --- | --- | 24 |
| 25 | --- | --- | --- | --- | 273.677 | 273.759 | 273.648 | 273.584 | 273.562 | --- | --- | --- | 25 |
| 26 | --- | --- | --- | --- | 273.692 | 273.768 | 273.640 | 273.585 | 273.587 | --- | --- | --- | 26 |
| 27 | --- | --- | --- | --- | 273.701 | 273.768 | 273.631 | 273.643 | 273.581 | --- | --- | --- | 27 |
| 28 | --- | --- | --- | 273.686A | 273.680 | 273.768 | 273.634 | 273.648 | 273.648 | --- | --- | --- | 28 |
| 29 | --- | | --- | 273.680 | 273.683 | 273.759 | 273.637 | 273.648 | 273.648 | --- | --- | --- | 29 |
| 30 | --- | | --- | 273.683 | 273.683 | 273.762 | 273.640 | 273.652 | 273.648 | --- | --- | --- | 30 |
| 31 | --- | | --- | | 273.674 | | 273.643 | 273.648 | | --- | --- | --- | 31 |
| MEAN | --- | --- | --- | --- | 273.679 | 273.734 | 273.681 | 273.588 | 273.570 | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 273.704 | 273.788 | 273.788 | 273.685 | 273.604 | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 273.659 | 273.648 | 273.631 | 273.643 | 273.648 | --- | --- | --- | MIN |

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 58 59 N
LONG 97 48 11 W

DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

A - MANUAL GAUGE

NATURAL FLOW

DRAINAGE AREA, 72.5 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## OVERFLOWING RIVER AT OVERFLOWING RIVER - STATION NO. 05LD001

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0 B | 0.0028 | 2.81 | 5.52 | 12.6 | 1.91 | 10.5 | 8.43 | --- | --- | 1 |
| 2 | --- | --- | 0 B | 0.0038 | 2.83 | 5.74 | 11.9 | 1.80 | 10.7 | 8.13 | --- | --- | 2 |
| 3 | --- | --- | 0 B | 0.0048 | 2.49 | 5.76 | 11.1 | 1.67 | 11.0 | 7.88 | --- | --- | 3 |
| 4 | --- | --- | 0 B | 0.0068 | 2.54 | 5.47 | 10.5 | 1.67 | 11.6 | 7.82 | --- | --- | 4 |
| 5 | --- | --- | 0 B | 0.0108 | 3.29 | 5.08 | 9.84 | 1.67 | 12.2 | 7.44 | --- | --- | 5 |
| 6 | --- | --- | 0 B | 0.0208 | 2.18 | 4.59 | 9.26 | 1.65 | 12.4 | 7.02 | --- | --- | 6 |
| 7 | --- | --- | 0 B | 0.0258 | 2.13 | 4.31 | 8.94 | 1.88 | 12.8 | 6.81 | --- | --- | 7 |
| 8 | --- | --- | 0 B | 0.0308 | 2.02 | 3.98 | 7.94 | 1.88 | 13.8 | 6.84 | --- | --- | 8 |
| 9 | --- | --- | 0 B | 0.0358 | 1.81 | 3.73 | 7.43 | 1.87 | 16.2 | 6.73 | --- | --- | 9 |
| 10 | --- | --- | 0 B | 0.0408 | 1.77 | 3.43 | 6.88 | 1.82 | 18.5 | 6.63 | --- | --- | 10 |
| 11 | --- | --- | 0 B | 0.0458 | 1.71 | 3.33 | 6.44 | 1.84 | 17.2 | 6.44 | --- | --- | 11 |
| 12 | --- | --- | 0 B | 0.0458 | 1.84 | 3.22 | 6.18 | 1.82 | 17.6 | 6.28 | --- | --- | 12 |
| 13 | --- | --- | 0 B | 0.3108 | 1.58 | 2.97 | 5.88 | 1.89 | 17.6 | 6.08 | --- | --- | 13 |
| 14 | --- | --- | 0 B | 0.7848 | 1.48 | 2.70 | 5.74 | 1.82 | 17.5 | 6.14 | --- | --- | 14 |
| 15 | --- | --- | 0 B | 1.55 B | 1.39 | 2.52 | 5.88 | 1.85 | 17.4 | 6.13 | --- | --- | 15 |
| 16 | --- | --- | 0 B | 1.84 B | 1.26 | 2.28 | 5.53 | 1.73 | 18.8 | 6.18 | --- | --- | 16 |
| 17 | --- | --- | 0 B | 1.38 B | 1.42 | 2.14 | 5.34 | 1.88 | 18.7 | 6.21 | --- | --- | 17 |
| 18 | --- | --- | 0 B | 1.08 B | 1.67 | 2.02 | 5.00 | 1.87 | 18.1 | 6.18 | --- | --- | 18 |
| 19 | --- | --- | 0 B | 0.8408 | 1.58 | 1.88 | 4.58 | 1.85 | 16.8 | 6.23 | --- | --- | 19 |
| 20 | --- | --- | 0 B | 1.08 B | 1.78 | 1.88 | 4.13 | 1.88 | 15.0 | 6.18 | --- | --- | 20 |
| 21 | --- | --- | 0 B | 1.31 B | 1.88 | 1.78 | 3.78 | 1.85 | 14.1 | 6.31 | --- | --- | 21 |
| 22 | --- | --- | 0 B | 2.13 B | 2.02 | 1.88 | 3.40 | 1.81 | 13.3 | 6.43 | --- | --- | 22 |
| 23 | --- | --- | 0 B | 3.30 B | 2.12 | 1.42 | 3.03 | 1.63 | 12.8 | 6.58 | --- | --- | 23 |
| 24 | --- | --- | 0 B | 3.99 B | 2.41 | 1.63 | 2.70 | 1.64 | 12.1 | 6.81 | --- | --- | 24 |
| 25 | --- | --- | 0 B | 4.48 B | 3.27 | 2.08 | 2.63 | 2.24 | 11.3 | 6.80 | --- | --- | 25 |
| 26 | --- | --- | 0 B | 4.22 B | 3.83 | 4.18 | 2.29 | 2.88 | 10.7 | 6.48 | --- | --- | 26 |
| 27 | --- | --- | 0 B | 3.86 | 4.36 | 5.18 | 2.11 | 3.28 | 10.3 | 7.39 | --- | --- | 27 |
| 28 | --- | --- | 0 B | 3.11 | 4.81 | 10.3 | 1.98 | 4.02 | 9.70 | 8.378 | --- | --- | 28 |
| 29 | --- | | 0 B | 2.79 | 5.01 | 12.1 | 2.01 | 6.81 | 8.88 | 7.138 | --- | --- | 29 |
| 30 | --- | | 0 B | 2.88 | 5.13 | 12.8 | 1.97 | 9.08 | 8.68 | 6.818 | --- | --- | 30 |
| 31 | --- | | 0.0018 | | 5.23 | | 1.98 | 8.88 | | 6.628 | --- | --- | 31 |
| TOTAL | --- | --- | 0.001 | 40.718 | 78.03 | 128.38 | 178.48 | 81.24 | 408.28 | 210.74 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 1.38 | 2.52 | 4.28 | 5.76 | 2.62 | 13.6 | 6.80 | --- | --- | MEAN |
| MAX | --- | --- | 0.001 | 4.48 | 5.23 | 12.8 | 12.6 | 9.08 | 17.6 | 8.43 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.002 | 1.38 | 1.42 | 1.88 | 1.63 | 8.68 | 6.08 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 4.88
MAXIMUM DAILY, 17.8 ON SEP 13
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
18.0 AT 16:46 CST ON SEP 13

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 53 09 15 N
LONG 101 04 30 W

DRAINAGE AREA, 3 380 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 15 400 |
| FEB | --- | AUG | 7 020 |
| MAR | 0.09 | SEP | 35 100 |
| APR | 3 520 | OCT | 18 200 |
| MAY | 6 740 | NOV | --- |
| JUN | 11 100 | DEC | --- |

TOTAL DISCHARGE, 97 100 dam³

## OXFORD LAKE AT OXFORD HOUSE - STATION NO. 05AA002

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | --- | --- | --- | 187.014A | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | --- | --- | --- | 187.023 | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | --- | --- | --- | 187.015 | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | --- | --- | --- | 187.015 | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | --- | --- | --- | 187.016 | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | --- | 187.019 | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | --- | 187.007 | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | --- | --- | --- | 187.017 | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | --- | --- | --- | 187.018 | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | --- | --- | --- | 187.013 | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | --- | --- | --- | 187.011 | --- | --- | --- | --- | --- | --- | 15 |
| 15 | --- | --- | --- | --- | --- | 187.013 | --- | --- | --- | --- | --- | --- | 15 |
| 17 | --- | --- | --- | --- | --- | 187.013 | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | --- | --- | --- | 187.040 | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | --- | --- | --- | 187.028 | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | --- | --- | --- | 187.048 | --- | --- | --- | --- | --- | --- | 20 |
| 21 | 188.864A | --- | --- | --- | --- | 187.088 | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | --- | --- | --- | 187.010 | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | --- | --- | --- | 188.981 | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | --- | --- | --- | 187.027 | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | --- | --- | --- | 187.005 | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | --- | --- | --- | 188.883 | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | --- | --- | --- | 187.001 | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | --- | --- | --- | 188.998 | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | --- | --- | --- | 187.000A | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | --- | | --- | | --- | --- | | --- | --- | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MIN |

WATER LEVELS IN METRES

MAXIMUM DAILY, 187.088 ON JUN 21

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 54 56 10 N
LONG 95 17 30 W

A - MANUAL GAUGE

NATURAL FLOW

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM
APPLY -183.585 m ADJUSTMENT TO CONVERT TO ASSUMED DATUM

## PANSY DRAIN NEAR SARTO - STATION NO. 05BE014

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.008 | 0 | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.017 | 0 | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0.017 | 0 | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 0.017 | 0 | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 B | 0.014 | 0 | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | 0B | 0 B | 0.010 | 0 | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | 0B | 0 B | 0.008 | 0 | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | 0B | 0 B | 0.005 | 0 | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | 0B | 0 B | 0.003 | 0 | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | 0B | 0 B | 0.002 | 0 | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | 0B | 0 B | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | 0B | 0 B | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | 0B | 0 B | 0 | 0.010 | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.0018 | 0 | 0.011 | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.0018 | 0 | 0.014 | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.0018 | 0 | 0.005 | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.1068 | 0 | 0.001 | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.1928 | 0 | 0 | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.092 | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.052 | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.045 | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.076 | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.088 | 0 | 0 | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.081 | 0 | 0 | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.087 | 0 | 0 | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.031 | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.021 | 0 | 0 | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.021 | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | 0B | 0.012 | 0.001 | 0 | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | 0B | 0.008 | 0 | 0 | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | --- | --- | | --- | --- | --- | 31 |
| TOTAL | --- | --- | 0 | 0.880 | 0.108 | 0.041 | --- | --- | --- | --- | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.028 | 0.003 | 0.001 | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.192 | 0.017 | 0.014 | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.008
MAXIMUM DAILY, 0.1928 ON APR 18
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
0.570 AT 07:12 CST ON APR 17

SUMMARY FOR THE MONTHS MAR TO JUN

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 23 05 N
LONG 96 43 53 W
DRAINAGE AREA, 46.8 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | --- |
| FEB | --- | AUG | --- |
| MAR | 0 | SEP | --- |
| APR | 78.0 | OCT | --- |
| MAY | 9.33 | NOV | --- |
| JUN | 3.84 | DEC | --- |

TOTAL DISCHARGE, 88.0 dam³

## PARTRIDGE CREEK NEAR ST. MARTIN - STATION NO. 05LM002

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 243.822 | 243.870 | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 243.813 | 243.848 | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | 243.809 | 243.827 | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | --- | 244.380A | 243.885 | 243.883 | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | --- | 244.314 | 243.819 | 243.892 | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | --- | 244.327 | 243.889 | 243.882 | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | --- | 244.328 | 243.868 | 243.838 | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | --- | 244.319A | 243.891 | 243.852 | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | --- | 244.283A | 243.901 | 243.887 | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | --- | 244.263A | 243.927 | 243.887 | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | --- | 244.324 | 244.024 | 243.872 | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | --- | 244.302A | 244.055 | 243.807 | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | --- | 244.438 | 244.000 | 243.803 | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | --- | 244.438 | 243.983 | 243.848 | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | --- | 244.387 | 243.948 | 243.888 | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | --- | 244.282 | 243.884 | 243.988 | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | --- | 244.188A | 243.885 | 243.984 | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | --- | 244.118 | 243.897 | 243.940 | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | --- | 244.084 | 243.875 | 243.988 | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | --- | 244.083 | 243.883 | 243.988 | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | --- | 244.070 | 243.887 | 243.988 | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | --- | 244.070 | 243.841 | 243.951 | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | --- | 244.047 | 243.912 | 243.941 | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | --- | 244.005 | 243.888 | 243.938 | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | --- | 243.883 | 243.844 | 243.936 | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | --- | 243.855 | 243.836 | 243.988 | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | --- | 243.835 | 243.879 | 243.948 | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | --- | 243.811 | 243.838 | 243.878 | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | --- | 243.885 | 243.882 | 244.074 | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | --- | 243.912 | 243.873 | 244.097 | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | --- | | 243.870 | | --- | --- | --- | --- | --- | --- | 31 |
| MEAN | --- | --- | --- | --- | 243.918 | 243.918 | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 244.055 | 244.097 | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 243.819 | 243.803 | --- | --- | --- | --- | --- | --- | MIN |

WATER LEVELS IN METRES

### SUMMARY FOR THE YEAR 1989

MAXIMUM DAILY, 244.438 ON APR 14

MAXIMUM INSTANTANEOUS,
244.482 AT 23:23 CST ON APR 13

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 42 30 N
LONG 98 39 30 W

A - MANUAL GAUGE

NATURAL FLOW

DRAINAGE AREA,
142 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM 1928 ADJUSTMENT

## PELICAN CREEK SOUTH TRIBUTARY NEAR BIRNIE - STATION NO. 05LL027

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.008 | 0.004 | 0.003 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.008 | 0.003 | 0.002 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0.008 | 0.003 | 0.001 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 0.007 | 0.003 | 0.001 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 B | 0.008 | 0.003 | 0.001 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0 B | 0.007 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0 B | 0.007 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0 B | 0.007 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0 B | 0.008 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0 B | 0.008 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0 B | 0.008 | 0.005 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0 B | 0.005 | 0.028 | 0.003 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0 B | 0.005 | 0.348 | 0.001 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0 B | 0.005 | 0.087 | 0.001 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 0 B | 0.005 | 0.049 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 0 B | 0.005 | 0.030 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 0 B | 0.005 | 0.021 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.007A | 0.005 | 0.018 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.005 | 0.005 | 0.012 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.005 | 0.005 | 0.010 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.007 | 0.004 | 0.007 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.013 | 0.004 | 0.006 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.018 | 0.004 | 0.005 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.018 | 0.005 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.014 | 0.007 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.012 | 0.008 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.010 | 0.005 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.008 | 0.005 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.008 | 0.004 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.008 | 0.004 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0.004 | | 0 | 0 | | 0 | --- | --- | 31 |
| TOTAL | --- | --- | 0 | 0.130 | 0.173 | 0.898 | 0.012 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.004 | 0.006 | 0.033 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.018 | 0.008 | 0.348 | 0.003 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0.004 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.004
MAXIMUM DAILY, 0.348 ON JUN 13
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
0.637 AT 04:07 CST ON JUN 13

### SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 28 36 N
LONG 98 28 33 W
DRAINAGE AREA, 9.09 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 1.04 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 11.2 | OCT | 0 |
| MAY | 14.9 | NOV | --- |
| JUN | 80.1 | DEC | --- |

TOTAL DISCHARGE, 87.3 dam³

## PELICAN LAKE NEAR NINETTE - STATION NO. 05OA802

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | 410.632 | --- | --- | --- | 410.835 | 410.780 | 410.720 | 410.628 | --- | --- | --- | 1 |
| 2 | --- | --- | --- | --- | --- | 410.835 | 410.780 | 410.717E | 410.628 | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | --- | 410.835 | 410.781 | 410.714E | 410.628E | --- | --- | --- | 3 |
| 4 | 410.785 | --- | --- | 410.862 | --- | 410.835 | 410.781 | 410.711E | 410.625E | --- | --- | --- | 4 |
| 5 | --- | --- | --- | --- | --- | 410.835 | 410.771 | 410.707E | 410.623 | --- | --- | --- | 5 |
| 6 | --- | --- | --- | --- | --- | 410.828 | 410.781 | 410.704E | 410.808 | --- | --- | 410.687 | 6 |
| 7 | --- | --- | --- | --- | --- | 410.828 | 410.771 | 410.701E | 410.808 | --- | --- | --- | 7 |
| 8 | --- | --- | --- | --- | --- | 410.817 | 410.771E | 410.698E | 410.578 | --- | --- | --- | 8 |
| 9 | --- | --- | --- | --- | --- | 410.817 | 410.771 | 410.695E | 410.578 | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 410.908 | 410.817 | 410.781 | 410.692E | 410.578 | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 410.828E | 410.828E | 410.741 | 410.688E | 410.588 | --- | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 410.849 | 410.831E | 410.721 | 410.685E | 410.588 | --- | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 410.838 | 410.838 | 410.728E | 410.682E | 410.588 | --- | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 410.908 | 410.838 | 410.731E | 410.678E | 410.588 | --- | --- | --- | 14 |
| 15 | --- | --- | --- | --- | 410.910 | 410.838 | 410.738E | 410.678E | 410.588 | --- | --- | --- | 15 |
| 16 | --- | --- | 410.784 | --- | 410.810 | 410.838 | 410.741 | 410.673 | 410.586 | --- | 410.485 | --- | 16 |
| 17 | --- | --- | --- | --- | 410.830 | 410.838 | 410.741 | 410.678 | 410.586E | --- | --- | --- | 17 |
| 18 | --- | --- | --- | 410.885 | 410.830 | 410.830 | 410.781 | 410.678 | 410.585E | --- | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 410.831 | 410.830 | 410.773 | 410.678 | 410.583E | --- | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 410.831 | 410.800 | 410.781 | 410.678 | 410.581E | --- | --- | --- | 20 |
| 21 | --- | 410.785 | --- | --- | 410.811 | 410.830 | 410.781 | 410.678 | 410.580E | --- | --- | --- | 21 |
| 22 | --- | --- | --- | --- | 410.802 | 410.830 | 410.781 | 410.688 | 410.548E | --- | --- | --- | 22 |
| 23 | --- | --- | --- | --- | 410.892 | 410.820 | 410.781 | 410.688 | 410.548E | --- | --- | --- | 23 |
| 24 | --- | --- | --- | --- | 410.892 | 410.820 | 410.781 | 410.688 | 410.548E | 410.538 | --- | --- | 24 |
| 25 | --- | --- | --- | --- | 410.893 | 410.810 | 410.781 | 410.688 | 410.543E | --- | --- | --- | 25 |
| 26 | --- | --- | --- | --- | 410.883 | 410.810 | 410.781 | 410.688 | 410.541E | --- | --- | --- | 26 |
| 27 | --- | --- | --- | 410.812 | 410.883 | 410.770 | 410.780 | 410.688 | 410.540E | --- | --- | --- | 27 |
| 28 | --- | --- | --- | --- | 410.883 | 410.800 | 410.780 | 410.688 | 410.538 | --- | --- | --- | 28 |
| 29 | --- | | --- | --- | 410.844 | 410.800 | 410.740 | 410.688 | 410.538 | --- | --- | --- | 29 |
| 30 | --- | | --- | --- | 410.844 | 410.800 | 410.730 | 410.688 | 410.528 | --- | --- | --- | 30 |
| 31 | --- | | --- | | 410.844 | | 410.720 | 410.528 | | --- | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | 410.822 | 410.765 | 410.683 | 410.570 | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | 410.838 | 410.781 | 410.720 | 410.628 | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | 410.770 | 410.720 | 410.528 | 410.528 | --- | --- | --- | MIN |

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 34 00 N
LONG 99 38 20 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1937

DRAINAGE AREA, 483 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## PEMBINA RIVER ABOVE LORNE LAKE - STATION NO. 05OA010

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0 B | 1.35 B | 0.088 | 0.026 | 0.013 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0 B | 3.01 B | 0.083 | 0.023 | 0.011 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0 B | 12.8 B | 0.080 | 0.022 | 0.012 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0 B | 12.8 B | 0.083 | 0.023 | 0.014 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0 B | 8.34 | 0.083 | 0.023 | 0.013 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0 B | 2.00 | 0.088 | 0.021 | 0.014 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0 B | 1.35 | 0.088 | 0.019 | 0.013 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0 B | 0.860 | 0.088 | 0.018 | 0.014 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0 B | 0.787 | 0.087 | 0.018 | 0.018 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0 B | 0.693 | 0.088 | 0.018 | 0.018 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0 B | 0.617 | 0.088 | 0.018 | 0.018 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0 B | 0.808 | 0.088 | 0.018 | 0.018 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0 B | 0.668 | 0.088 | 0.020 | 0.018 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0 B | 0.526 | 0.051 | 0.020 | 0.018 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0 B | 0.633 | 0.044 | 0.019 | 0.014 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0 B | 0.548 | 0.048 | 0.018 | 0.014 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0 B | 0.491 | 0.044 | 0.018 | 0.013 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0 B | 0.471 | 0.047 | 0.018 | 0.011 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0 B | 0.430 | 0.048 | 0.018 | 0.011 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0 B | 0.386 | 0.084 | 0.018 | 0.011 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0 B | 0.484 | 0.088 | 0.014 | 0.010 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0 B | 0.482 | 0.051 | 0.012 | 0.008 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0 B | 0.438 | 0.047 | 0.012 | 0.007 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0 B | 0.301 | 0.058 | 0.012 | 0.008 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0 B | 0.220 | 0.060 | 0.013 | 0.008 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0 B | 0.228 | 0.057 | 0.010 | 0.008 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0.1668 B | 0.228 | 0.051 | 0.011 | 0.001 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 7.82 B | 0.230 | 0.048 | 0.013 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 4.05 B | 0.205 | 0.048 | 0.016 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 2.75 B | 0.081 | 0.040 | 0.018 | 0.001 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 1.88 B | | 0.032 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 16.716 | 48.228 | 1.716 | 0.808 | 0.311 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.539 | 1.64 | 0.055 | 0.017 | 0.010 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 7.89 | 12.8 | 0.089 | 0.026 | 0.018 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.081 | 0.032 | 0.010 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.280
MAXIMUM DAILY, 12.8B ON APR 4
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
30.8B AT 00:05 CST ON APR 4

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 15 50 N
LONG 99 27 44 W
DRAINAGE AREA, 849 km²

B - ICE CONDITIONS

REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 28.8 |
| FEB | --- | AUG | 0 |
| MAR | 1 440 | SEP | 0 |
| APR | 4 280 | OCT | 0 |
| MAY | 148 | NOV | --- |
| JUN | 43.5 | DEC | --- |

TOTAL DISCHARGE, 5 810 dam³

## PEMBINA RIVER AT NECHE - STATION NO. 05DC004

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.0108 | 0 | 0 | 0 | 4.78 | 1.78 | 1.08 | 0.118 | 0 | 0 | 0 | 0.0038 | 1 |
| 2 | 0.0108 | 0 | 0 | 0 | 4.87 | 1.67 | 0.834 | 0.078 | 0 | 0 | 0 | 0 E | 2 |
| 3 | 0.0108 | 0 | 0 | 0 | 4.33 | 1.58 | 0.678 | 0.064 | 0 | 0 | 0 | 0 E | 3 |
| 4 | 0.0108 | 0 | 0 | 0 | 3.88 | 1.53 | 0.783 | 0.034 | 0 | 0 | 0 | 0 E | 4 |
| 5 | 0.0088 | 0 | 0 | 0 | 3.48 | 1.47 | 0.708 | 0.0388 | 0 | 0 | 0 | 0 E | 5 |
| 6 | 0.0088 | 0 | 0 | 0 | 3.81 | 1.33 | 0.823 | 0.023E | 0 | 0 | 0 | 0 E | 6 |
| 7 | 0.0088 | 0 | 0 | 0 | 3.43 | 1.30 | 0.868 | 0.021E | 0 | 0 | 0.014 | 0 E | 7 |
| 8 | 0.0088 | 0 | 0 | 0 | 3.34 | 1.30 | 0.510 | 0.021E | 0 | 0 | 0.108 | 0 E | 8 |
| 9 | 0.0088 | 0 | 0 | 0 | 3.31 | 1.33 | 0.481 | 0.020E | 0 | 0 | 0.311 | 0 E | 9 |
| 10 | 0.0088 | 0 | 0 | 0 | 3.34 | 1.42 | 0.483 | 0.018E | 0 | 0 | 0.263 | 0 E | 10 |
| 11 | 0.0088 | 0 | 0 | 0 | 3.20 | 1.47 | 0.425 | 0.017E | 0 | 0 | 0.283 | 0 E | 11 |
| 12 | 0.0088 | 0 | 0 | 0 | 3.00 | 1.47 | 0.388 | 0.014E | 0 | 0 | 0.278 | 0 E | 12 |
| 13 | 0.0088 | 0 | 0 | 0.0028 | 2.84 | 1.83 | 0.311 | 0.011E | 0 | 0 | 0.262 | 0 E | 13 |
| 14 | 0.0088 | 0 | 0 | 0.1708 | 2.84 | 1.81 | 0.311 | 0.010E | 0 | 0 | 0.280 | 0 E | 14 |
| 15 | 0.0088 | 0 | 0 | 0.2838 | 2.89 | 2.82 | 0.311 | 0.008E | 0 | 0 | 0.278 | 0 E | 15 |
| 16 | 0.0068 | 0 | 0 | 0.5698 | 2.75 | 3.34 | 0.283 | 0.007E | 0 | 0 | 0.210 | 0 E | 16 |
| 17 | 0.0078 | 0 | 0 | 14.2 E | 2.61 | 2.58 | 0.281 | 0.006E | 0 | 0 | 0.158 | 0 E | 17 |
| 18 | 0.0088 | 0 | 0 | 17.8 E | 2.58 | 2.07 | 0.198 | 0.008E | 0 | 0 | 0.102 | 0 E | 18 |
| 19 | 0.0048 | 0 | 0 | 12.7 | 2.52 | 1.78 | 0.007 | 0.005E | 0 | 0 | 0.085 | 0 E | 19 |
| 20 | 0.0018 | 0 | 0 | 13.8 | 2.52 | 1.84 | 0.051 | 0.004E | 0 | 0 | 0.110 | 0 E | 20 |
| 21 | 0 | 0 | 0 | 14.4 | 2.68 | 1.47 | 0.218 | 0.003E | 0 | 0 | 0.1068 | 0 E | 21 |
| 22 | 0 | 0 | 0 | 13.2 | 2.38 | 1.42 | 0.218 | 0.003E | 0 | 0 | 0.1028 | 0 E | 22 |
| 23 | 0 | 0 | 0 | 10.8 | 2.32 | 1.39 | 0.187 | 0.002E | 0 | 0 | 0.0888 | 0 E | 23 |
| 24 | 0 | 0 | 0 | 10.0 | 2.27 | 1.33 | 0.178 | 0.002E | 0 | 0 | 0.0818 | 0 E | 24 |
| 25 | 0 | 0 | 0 | 9.23 | 2.24 | 1.26 | 0.164 | 0.001E | 0 | 0 | 0.0888 | 0 E | 25 |
| 26 | 0 | 0 | 0 | 8.07 | 2.24 | 1.18 | 0.144 | 0.001E | 0 | 0 | 0.0798 | 0 E | 26 |
| 27 | 0 | 0 | 0 | 7.70 | 2.24 | 1.10 | 0.126 | 0 | 0 | 0 | 0.0748 | 0 E | 27 |
| 28 | 0 | 0 | 0 | 6.87 | 2.10 | 1.08 | 0.130 | 0 | 0 | 0 | 0.0718 | 0 E | 28 |
| 29 | 0 | | 0 | 6.08 | 2.01 | 1.13 | 0.138 | 0 | 0 | 0 | 0.0428 | 0 E | 29 |
| 30 | 0 | | 0 | 5.24 | 1.88 | 1.10 | 0.184 | 0 | 0 | 0 | 0.0288 | 0 E | 30 |
| 31 | 0 | | 0 | | 1.80 | | 0.144 | 0 | | 0 | | 0 E | 31 |
| TOTAL | 0.154 | 0 | 0 | 150.891 | 90.28 | 47.74 | 11.328 | 0.814 | 0 | 0 | 3.810 | 0.003 | TOTAL |
| MEAN | 0.005 | 0 | 0 | 5.03 | 2.81 | 1.59 | 0.365 | 0.017 | 0 | 0 | 0.130 | 0 | MEAN |
| MAX | 0.010 | 0 | 0 | 17.8 | 4.78 | 3.34 | 1.08 | 0.118 | 0 | 0 | 0.311 | 0.003 | MAX |
| MIN | 0 | 0 | 0 | 0 | 1.80 | 1.08 | 0.007 | 0 | 0 | 0 | 0 | 0 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.825
MAXIMUM DAILY, 17.88 ON APR 18
MINIMUM DAILY, 0 ON JAN 21
MAXIMUM INSTANTANEOUS,
28.3 AT 21:00 CST ON APR 17

SUMMARY FOR THE YEAR 1988

INTERNATIONAL GAUGING STATION
TYPE OF GAUGE - RECORDING
LOCATION - LAT 48 59 20 N
LONG 97 33 05 W
DRAINAGE AREA, 8 480 km²

3 - ICE CONDITIONS
E - ESTIMATED
REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 13.3 | JUL | 878 |
| FEB | 0 | AUG | 44.4 |
| MAR | 0 | SEP | 0 |
| APR | 13 000 | OCT | 0 |
| MAY | 7 800 | NOV | 312 |
| JUN | 4 120 | DEC | 0.28 |

TOTAL DISCHARGE, 26 300 dam³

## PEMBINA RIVER BELOW CRYSTAL CREEK - STATION NO. 05DB023

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.0038 | 0.0088 | 0.0388 | 0.0048 | 3.14 | 0.288 | 0.133 | 0.004 | 0.008 | 0.008 | 0.014 | 0.008 | 1 |
| 2 | 0.0038 | 0.0088 | 0.0448 | 0.0128 | 2.87 | 0.370 | 0.123 | 0.003 | 0.008 | 0.007 | 0.013 | 0.013 | 2 |
| 3 | 0.0038 | 0.0088 | 0.0488 | 0.0478 | 2.82 | 0.258 | 0.120 | 0.003 | 0.019 | 0.011 | 0.013 | 0.010 | 3 |
| 4 | 0.0038 | 0.0048 | 0.0618 | 0.0958 | 3.81 | 0.200 | 0.218 | 0.001 | 0.022 | 0.011 | 0.028 | 0.008 | 4 |
| 5 | 0.0038 | 0.0048 | 0.0638 | 0.1188 | 3.41 | 0.163 | 0.148 | 0.002 | 0.023 | 0.018 | 0.032 | 0.0058 | 5 |
| 6 | 0.0038 | 0.0048 | 0.0618 | 0.1188 | 3.08 | 0.113 | 0.072 | 0.001 | 0.013 | 0.018 | 0.028 | 0.0048 | 6 |
| 7 | 0.0028 | 0.0038 | 0.0638 | 0.0338 | 2.41 | 0.087 | 0.107 | 0.001 | 0.008 | 0.022 | 0.024 | 0.0028 | 7 |
| 8 | 0.0038 | 0.0028 | 0.0628 | 0.0028 | 2.31 | 0.100 | 0.040 | 0 | 0.007 | 0.023 | 0.024 | 0.0038 | 8 |
| 9 | 0.0038 | 0.0038 | 0.0628 | 0.3898 | 2.03 | 0.088 | 0.021 | 0 | 0.008 | 0.024 | 0.020 | 0.0028 | 9 |
| 10 | 0.0038 | 0.0028 | 0.0598 | 1.78 E | 1.78 | 0.087 | 0.018 | 0 | 0.008 | 0.024 | 0.018 | 0.0018 | 10 |
| 11 | 0.0048 | 0.0038 | 0.0488 | 2.24 E | 1.48 | 0.088 | 0.007 | 0 | 0.024 | 0.025 | 0.017 | 0.0018 | 11 |
| 12 | 0.0058 | 0.0038 | 0.0358 | 2.48 E | 1.11 | 0.120 | 0.008 | 0 | 0.004 | 0.028 | 0.013 | 0.0018 | 12 |
| 13 | 0.0068 | 0.0028 | 0.0278 | 4.04 E | 1.02 | 0.214 | 0.008 | 0 | 0.002 | 0.028 | 0.013 | 0.0018 | 13 |
| 14 | 0.0068 | 0.0028 | 0.0338 | 5.70 E | 1.02 | 0.181 | 0.008 | 0 | 0.002 | 0.028 | 0.012 | 0.0018 | 14 |
| 15 | 0.0068 | 0.0018 | 0.0288 | 14.3 E | 0.873 | 0.139 | 0.008 | 0 | 0.001 | 0.034 | 0.009 | 0.0018 | 15 |
| 16 | 0.0068 | 0.0018 | 0.0258 | 13.8 E | 0.870 | 0.088 | 0.007 | 0 | 0.001 | 0.038 | 0.008 | 0.0018 | 16 |
| 17 | 0.0118 | 0.0028 | 0.0268 | 10.2 | 0.820 | 0.080 | 0.017 | 0 | 0.003 | 0.038 | 0.008 | 0.0018 | 17 |
| 18 | 0.0128 | 0.0048 | 0.0268 | 8.38 | 0.688 | 0.072 | 0.012 | 0 | 0.003 | 0.044 | 0.008 | 0.0018 | 18 |
| 19 | 0.0128 | 0.0068 | 0.0248 | 7.27 | 0.688 | 0.057 | 0.010 | 0 | 0.002 | 0.023 | 0.008 | 0.0018 | 19 |
| 20 | 0.0138 | 0.0068 | 0.0258 | 8.47 | 0.978 | 0.081 | 0.013 | 0 | 0.002 | 0.020 | 0.008 | 0.0018 | 20 |
| 21 | 0.0158 | 0.0078 | 0.0288 | 8.88 | 1.24 | 0.063 | 0.012 | 0 | 0.005 | 0.020 | 0.010 | 0.0018 | 21 |
| 22 | 0.0168 | 0.0088 | 0.0268 | 8.61 | 0.788 | 0.033 | 0.012 | 0 | 0.002 | 0.018 | 0.010 | 0.0018 | 22 |
| 23 | 0.0148 | 0.0158 | 0.0238 | 8.18 | 0.818 | 0.030 | 0.008 | 0 | 0.002 | 0.018 | 0.010 | 0.0018 | 23 |
| 24 | 0.0138 | 0.0218 | 0.0228 | 8.11 | 0.818 | 0.028 | 0.008 | 0 | 0.004 | 0.018 | 0.007 | 0.0018 | 24 |
| 25 | 0.0188 | 0.0258 | 0.0208 | 8.31 | 0.817 | 0.037 | 0.008 | 0 | 0.004 | 0.013 | 0.007 | 0.0018 | 25 |
| 26 | 0.0178 | 0.0288 | 0.0208 | 4.88 | 0.724 | 0.028 | 0.008 | 0 | 0.004 | 0.018 | 0.008 | 0.0018 | 26 |
| 27 | 0.0158 | 0.0338 | 0.0188 | 4.48 | 0.577 | 0.042 | 0.003 | 0 | 0.008 | 0.013 | 0.007 | 0.0018 | 27 |
| 28 | 0.0158 | 0.0338 | 0.0108 | 4.03 | 0.487 | 0.081 | 0.004 | 0.001 | 0.007 | 0.010 | 0.008 | 0.0018 | 28 |
| 29 | 0.0158 | | 0.0078 | 3.88 | 0.362 | 0.071 | 0.007 | 0.003 | 0.007 | 0.014 | 0.008 | 0.0018 | 29 |
| 30 | 0.0188 | | 0.0048 | 3.35 | 0.308 | 0.087 | 0.007 | 0.005 | 0.008 | 0.008 | 0.004 | 0.0018 | 30 |
| 31 | 0.0108 | | 0.0038 | | 0.328 | | 0.007 | 0.008 | | 0.018 | | 0.0018 | 31 |
| TOTAL | 0.280 | 0.237 | 1.007 | 128.044 | 42.877 | 3.324 | 1.188 | 0.032 | 0.210 | 0.627 | 0.378 | 0.073 | TOTAL |
| MEAN | 0.008 | 0.008 | 0.032 | 4.30 | 1.37 | 0.111 | 0.037 | 0.001 | 0.007 | 0.020 | 0.013 | 0.002 | MEAN |
| MAX | 0.017 | 0.033 | 0.063 | 14.3 | 3.41 | 0.370 | 0.218 | 0.008 | 0.024 | 0.044 | 0.032 | 0.013 | MAX |
| MIN | 0.002 | 0.001 | 0.003 | 0.002 | 0.308 | 0.028 | 0.003 | 0 | 0.001 | 0.008 | 0.004 | 0.001 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.480
MAXIMUM DAILY, 14.38 ON APR 15
MINIMUM DAILY, 0 ON AUG 8
MAXIMUM INSTANTANEOUS,
15.18 AT 01:00 CST ON APR 16

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 48 13 18 N
LONG 98 02 03 W
DRAINAGE AREA, 4 470 km²

B - ICE CONDITIONS

REGULATED SINCE 1940

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 24.2 | JUL | 88.8 |
| FEB | 20.5 | AUG | 2.78 |
| MAR | 87.0 | SEP | 18.1 |
| APR | 11 100 | OCT | 54.2 |
| MAY | 3 880 | NOV | 32.7 |
| JUN | 287 | DEC | 6.31 |

TOTAL DISCHARGE, 15 400 dam³

## PEMBINA RIVER NEAR KILLARNEY - STATION NO. 05DA005

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0 B | 1.83 B | 0.070 | 0.003 | 0.011 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0 B | 10.3 | 0.050 | 0.003 | 0.008 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0 B | 8.13 | 0.055 | 0.002 | 0.002 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0 B | 3.88 | 0.052 | 0.003 | 0.001 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0 B | 1.30 | 0.042 | 0.002 | 0.001 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0 B | 0.714 | 0.035 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0 B | 0.401 | 0.034 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0 B | 0.242 | 0.030 | 0.003 | 0.003 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0 B | 0.191 | 0.029 | 0.002 | 0.003 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0 B | 0.150 | 0.027 | 0.001 | 0.002 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0 B | 0.144 | 0.028 | 0.002 | 0.002 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0 B | 0.140 | 0.023 | 0.003 | 0.001 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0 B | 0.161 | 0.021 | 0.013 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0 B | 0.172 | 0.018 | 0.015 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0 B | 0.157 | 0.008 | 0.044 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0 B | 0.158 | 0.009 | 0.052 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0 B | 0.135 | 0.021 | 0.049 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0 B | 0.123 | 0.033 | 0.043 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0 B | 0.115 | 0.043 | 0.029 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0 B | 0.110 | 0.042 | 0.018 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0 B | 0.105 | 0.035 | 0.007 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0 B | 0.101 | 0.027 | 0.007 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0.1438 | 0.102 | 0.014 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0.8898 | 0.099 | 0.008 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 2.65 B | 0.102 | 0.008 | 0.010 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 4.70 B | 0.102 | 0.008 | 0.010 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 5.93 B | 0.101 | 0.017 | 0.011 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 3.27 B | 0.095 | 0.021 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 2.05 B | 0.088 | 0.012 | 0.014 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 1.31 B | 0.076 | 0.008 | 0.015 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0.9618 | | 0.004 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 23.793 | 26.055 | 0.834 | 0.382 | 0.032 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.736 | 0.935 | 0.027 | 0.013 | 0.001 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 5.93 | 10.3 | 0.070 | 0.052 | 0.011 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.076 | 0.004 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.213
MAXIMUM DAILY, 10.3 ON APR 2
MINIMUM DAILY, 0 ON MAR 1
MAXIMUM INSTANTANEOUS,
13.2 AT 21:37 CST ON APR 2

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 12 41 N
LONG 99 44 36 W
DRAINAGE AREA, 335 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 2.78 |
| FEB | --- | AUG | 0 |
| MAR | 1 970 | SEP | 0 |
| APR | 2 420 | OCT | 0 |
| MAY | 72.1 | NOV | --- |
| JUN | 33.0 | DEC | --- |

TOTAL DISCHARGE, 4 800 dam³

## PEMBINA RIVER NEAR WINDYGATES - STATION NO. 05DB007

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0B | 0B | 0B | 0 B | 2.74 | 1.32 | 0.100 | 0.002 | 0 | 0 | 0 | 0 | 1 |
| 2 | 0B | 0B | 0B | 0 B | 2.63 | 1.03 | 0.127 | 0.001 | 0 | 0 | 0 | 0 | 2 |
| 3 | 0B | 0B | 0B | 0 B | 2.48 | 0.808 | 0.088 | 0 | 0 | 0 | 0 | 0 | 3 |
| 4 | 0B | 0B | 0B | 0 B | 2.41 | 0.675 | 0.061 | 0 | 0 | 0 | 0 | 0 | 4 |
| 5 | 0B | 0B | 0B | 0 B | 2.32 | 0.553 | 0.057 | 0 | 0 | 0 | 0 | 0 | 5 |
| 6 | 0B | 0B | 0B | 0 B | 2.33 | 0.721 | 0.038 | 0 | 0 | 0 | 0 | 0 | 6 |
| 7 | 0B | 0B | 0B | 0 B | 2.42 | 1.18 | 0.022 | 0 | 0 | 0 | 0 | 0 | 7 |
| 8 | 0B | 0B | 0B | 0 B | 2.54 | 1.08 | 0.041 | 0 | 0 | 0 | 0 | 0 | 8 |
| 9 | 0B | 0B | 0B | 0 B | 2.35 | 0.888 | 0.118 | 0 | 0 | 0 | 0 | 0 | 9 |
| 10 | 0B | 0B | 0B | 0 B | 2.29 | 0.742 | 0.066 | 0 | 0 | 0 | 0 | 0 | 10 |
| 11 | 0B | 0B | 0B | 0 B | 2.31 | 0.685 | 0.060 | 0 | 0 | 0 | 0 | 0 | 11 |
| 12 | 0B | 0B | 0B | 0.1208 | 2.27 | 1.14 | 0.060 | 0 | 0 | 0 | 0 | 0 | 12 |
| 13 | 0B | 0B | 0B | 1.32 B | 2.18 | 1.40 | 0.071 | 0 | 0 | 0 | 0 | 0 | 13 |
| 14 | 0B | 0B | 0B | 4.88 | 2.03 | 1.20 | 0.053 | 0 | 0 | 0 | 0 | 0 | 14 |
| 15 | 0B | 0B | 0B | 7.15 | 1.98 | 0.949 | 0.038 | 0 | 0 | 0 | 0 | 0 | 15 |
| 16 | 0B | 0B | 0B | 10.8 | 2.03 | 0.840 | 0.038 | 0 | 0 | 0 | 0 | 0 | 16 |
| 17 | 0B | 0B | 0B | 9.44 | 2.08 | 0.781 | 0.018 | 0 | 0 | 0 | 0 | 0 | 17 |
| 18 | 0B | 0B | 0B | 8.14 | 2.08 | 0.778 | 0.012 | 0 | 0 | 0 | 0 | 0 | 18 |
| 19 | 0B | 0B | 0B | 9.88 | 1.98 | 0.745 | 0.010 | 0 | 0 | 0 | 0 | 0 | 19 |
| 20 | 0B | 0B | 0B | 8.80 | 1.91 | 0.715 | 0.007 | 0 | 0 | 0 | 0 | 0 | 20 |
| 21 | 0B | 0B | 0B | 8.70 | 1.84 | 0.802 | 0.007 | 0 | 0 | 0 | 0 | 0 | 21 |
| 22 | 0B | 0B | 0B | 8.28 | 1.88 | 0.833 | 0.004 | 0 | 0 | 0 | 0 | 0 | 22 |
| 23 | 0B | 0B | 0B | 6.74 | 1.88 | 0.819 | 0.003 | 0 | 0 | 0 | 0 | 0 | 23 |
| 24 | 0B | 0B | 0B | 4.81 | 1.88 | 0.418 | 0.004 | 0 | 0 | 0 | 0 | 0 | 24 |
| 25 | 0B | 0B | 0B | 5.06 | 1.82 | 0.290 | 0.002 | 0 | 0 | 0 | 0 | 0 | 25 |
| 26 | 0B | 0B | 0B | 4.62 | 1.86 | 0.376 | 0.003 | 0 | 0 | 0 | 0 | 0 | 26 |
| 27 | 0B | 0B | 0B | 3.88 | 1.84 | 0.211 | 0.005 | 0 | 0 | 0 | 0 | 0 | 27 |
| 28 | 0B | 0B | 0B | 3.24 | 1.67 | 0.187 | 0.006 | 0 | 0 | 0 | 0 | 0 | 28 |
| 29 | 0B | | 0B | 2.18 | 1.48 | 0.218 | 0.008 | 0 | 0 | 0 | 0 | 0 | 29 |
| 30 | 0B | | 0B | 2.00 | 1.41 | 0.192 | 0.003 | 0 | 0 | 0 | 0 | 0 | 30 |
| 31 | 0B | | 0B | | 1.33 | | 0.003 | 0 | | 0 | | 0 | 31 |
| TOTAL | 0 | 0 | 0 | 101.680 | 63.81 | 21.896 | 1.088 | 0.003 | 0 | 0 | 0 | 0 | TOTAL |
| MEAN | 0 | 0 | 0 | 3.38 | 2.06 | 0.730 | 0.035 | 0 | 0 | 0 | 0 | 0 | MEAN |
| MAX | 0 | 0 | 0 | 10.8 | 2.74 | 1.40 | 0.127 | 0.002 | 0 | 0 | 0 | 0 | MAX |
| MIN | 0 | 0 | 0 | 0 | 1.33 | 0.187 | 0.002 | 0 | 0 | 0 | 0 | 0 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.816
MAXIMUM DAILY, 10.8 ON APR 15
MINIMUM DAILY, 0B ON JAN 1
MAXIMUM INSTANTANEOUS,
12.8 AT 01:08 CST ON APR 15

SUMMARY FOR THE YEAR 1988

INTERNATIONAL GAUGING STATION
TYPE OF GAUGE - RECORDING
LOCATION - LAT 48 01 53 N
LONG 98 18 40 W
DRAINAGE AREA, 7 510 km²

B - ICE CONDITIONS

REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 0 | JUL | 94.8 |
| FEB | 0 | AUG | 0.26 |
| MAR | 0 | SEP | 0 |
| APR | 5 770 | OCT | 0 |
| MAY | 5 510 | NOV | 0 |
| JUN | 1 890 | DEC | 0 |

TOTAL DISCHARGE, 18 300 dam³

## PIGEON RIVER AT OUTLET OF ROUND LAKE - STATION NO. 05RD005

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18.88 | 21.88 | 21.88 | 19.78 | 25.1 | 47.8 | 107 | 113 | 84.3 | 70.8 | 58.8 | 46.58 | 1 |
| 2 | 18.78 | 21.88 | 21.68 | 19.68 | 24.8 | 47.0 | 108 | 114 | 82.8 | 70.3 | 58.8 | 44.88 | 2 |
| 3 | 18.78 | 21.18 | 21.38 | 19.38 | 24.4 | 48.3 | 110 | 118 | 81.8 | 69.7 | 58.48 | 44.88 | 3 |
| 4 | 18.68 | 20.88 | 21.18 | 19.38 | 24.8 | 45.7 | 110 | 121 | 81.3 | 68.4 | 58.18 | 44.88 | 4 |
| 5 | 18.68 | 20.88 | 20.88 | 19.38 | 24.4 | 45.8 | 111 | 121 | 80.8 | 68.1 | 54.88 | 44.08 | 5 |
| 6 | 18.68 | 21.18 | 20.78 | 19.28 | 24.7 | 45.8 | 112 | 120 | 88.4 | 68.0 | 54.88 | 42.88 | 6 |
| 7 | 18.68 | 21.38 | 20.78 | 19.18 | 24.8 | 45.0 | 113 | 118 | 88.8 | 68.8 | 54.18 | 42.18 | 7 |
| 8 | 18.88 | 21.88 | 20.48 | 18.88 | 24.8 | 44.7 | 115 | 118 | 88.8 | 68.4 | 53.88 | 42.48 | 8 |
| 9 | 18.38 | 22.08 | 20.68 | 18.88 | 24.4 | 44.8 | 117 | 118 | 88.8 | 68.4 | 53.88 | 41.88 | 9 |
| 10 | 19.48 | 22.18 | 21.18 | 18.78 | 24.3 | 45.0 | 118 | 117 | 89.1 | 68.0 | 53.38 | 41.48 | 10 |
| 11 | 18.88 | 22.08 | 21.28 | 18.68 | 24.8 | 45.0 | 118 | 115 | 88.8 | 67.1 | 53.18 | 41.28 | 11 |
| 12 | 18.48 | 21.88 | 21.48 | 18.38 | 26.1 | 47.4 | 118 | 113 | 88.2 | 66.4 | 52.68 | 40.78 | 12 |
| 13 | 20.08 | 22.08 | 21.38 | 18.38 | 24.7 | 52.8 | 120 | 112 | 87.7 | 65.8 | 52.08 | 38.48 | 13 |
| 14 | 20.28 | 22.28 | 21.18 | 18.28 | 23.8 | 54.8 | 120 | 111 | 87.0 | 64.8 | 51.78 | 38.88 | 14 |
| 15 | 20.28 | 22.38 | 21.08 | 18.28 | 23.3 | 55.8 | 121 | 110 | 86.3 | 64.3 | 51.48 | 38.48 | 15 |
| 16 | 20.38 | 22.08 | 20.78 | 18.28 | 23.0 | 57.1 | 121 | 108 | 85.1 | 63.8 | 51.18 | 38.18 | 16 |
| 17 | 20.48 | 21.88 | 20.48 | 18.38 | 22.8 | 58.4 | 122 | 108 | 84.1 | 63.1 | 50.88 | 37.78 | 17 |
| 18 | 20.88 | 21.38 | 20.38 | 18.38 | 23.8 | 60.4 | 122 | 107 | 83.1 | 62.7 | 49.68 | 37.28 | 18 |
| 19 | 20.88 | 21.38 | 20.18 | 18.28 | 24.8 | 61.8 | 121 | 108 | 82.2 | 61.8 | 49.58 | 37.08 | 19 |
| 20 | 20.88 | 21.08 | 20.18 | 18.38 | 27.4 | 62.9 | 121 | 110 | 80.8 | 61.3 | 49.48 | 36.78 | 20 |
| 21 | 21.28 | 21.18 | 20.08 | 18.88 | 30.4 | 64.5 | 120 | 108 | 80.6 | 60.4 | 48.48 | 36.78 | 21 |
| 22 | 21.38 | 21.08 | 20.08 | 20.28 | 31.6 | 66.3 | 118 | 107 | 78.5 | 59.7 | 48.08 | 36.58 | 22 |
| 23 | 21.28 | 21.18 | 19.78 | 22.38 | 31.1 | 68.2 | 118 | 106 | 78.3 | 59.1 | 48.48 | 36.78 | 23 |
| 24 | 21.28 | 21.28 | 19.68 | 24.28 | 31.1 | 71.6 | 118 | 105 | 77.4 | 58.5 | 48.08 | 36.78 | 24 |
| 25 | 21.58 | 21.28 | 20.18 | 25.68 | 34.4 | 76.9 | 117 | 105 | 76.7 | 58.0 | 47.98 | 36.58 | 25 |
| 26 | 21.58 | 21.48 | 20.48 | 25.8 | 41.3 | 81.3 | 118 | 103 | 75.6 | 57.5 | 47.78 | 36.58 | 26 |
| 27 | 21.68 | 21.58 | 20.68 | 25.6 | 44.7 | 88.2 | 114 | 101 | 74.6 | 57.5 | 47.58 | 36.38 | 27 |
| 28 | 21.78 | 22.08 | 20.68 | 25.7 | 45.5 | 102 | 113 | 98.9 | 73.8 | 57.5 | 47.38 | 36.08 | 28 |
| 29 | 21.88 | | 20.58 | 25.6 | 46.3 | 103 | 113 | 97.9 | 72.7 | 57.5 | 47.38 | 35.88 | 29 |
| 30 | 21.88 | | 20.18 | 25.5 | 47.0 | 105 | 114 | 88.6 | 71.8 | 57.5 | 46.88 | 35.48 | 30 |
| 31 | 21.88 | | 19.88 | | 47.8 | | 114 | 95.1 | | 57.1 | | 35.88 | 31 |
| TOTAL | 628.3 | 602.4 | 640.4 | 614.3 | 818.8 | 1 847.4 | 3 803 | 3 407.6 | 2 520.9 | 1 873.4 | 1 636.8 | 1 218.2 | TOTAL |
| MEAN | 20.3 | 21.5 | 20.7 | 20.5 | 26.7 | 61.6 | 118 | 110 | 84.0 | 63.7 | 51.3 | 39.3 | MEAN |
| MAX | 21.8 | 22.3 | 21.8 | 25.9 | 47.8 | 108 | 122 | 121 | 84.3 | 70.8 | 58.8 | 46.5 | MAX |
| MIN | 18.8 | 20.8 | 19.7 | 18.2 | 22.8 | 44.7 | 107 | 95.1 | 71.8 | 57.1 | 46.8 | 35.8 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 53.5
MAXIMUM DAILY, 122 ON JUL 17
MINIMUM DAILY, 18.28 ON APR 14
MAXIMUM INSTANTANEOUS,
123 AT 23:58 CST ON JUL 17

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 52 01 48 N
LONG 98 23 37 W

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 64 300 | JUL | 311 000 |
| FEB | 62 000 | AUG | 284 000 |
| MAR | 85 300 | SEP | 218 000 |
| APR | 63 100 | OCT | 171 000 |
| MAY | 79 500 | NOV | 133 000 |
| JUN | 180 000 | DEC | 105 000 |

TOTAL DISCHARGE, 1 890 000 dam³

## PILOT CREEK NEAR PILOT MOUND - STATION NO. 05OB025

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.031 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.029 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0.028 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 0.026 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 B | 0.020 | 0 | 0.001 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0 B | 0.017 | 0 | 0.015 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0 B | 0.021 | 0 | 0.011 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0 B | 0.028 | 0 | 0.002 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0 B | 0.022 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0 B | 0.026 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.0018 | 0.041 | 0 | 0 | 0 | 0.002 | 0.331 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.0038 | 0.018 | 0 | 0 | 0 | 0.001 | 0.008 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.0028 | 0.008 | 0.001 | 0 | 0 | 0.001 | 0.004 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.0058 | 0.003 | 0 | 0 | 0 | 0.001 | 0.004 | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.1898 | 0.002 | 0 | 0 | 0 | 0 | 0.003 | --- | --- | 15 |
| 16 | --- | --- | 0B | 1.04 B | 0.001 | 0 | 0 | 0.491 | 0 | 0.003 | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.388 | 0 | 0 | 0 | 0.017 | 0 | 0.001 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.121 | 0 | 0 | 0 | 0.858 | 0 | 0.001 | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.073 | 0 | 0 | 0 | 0.018 | 0 | 0.001 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.053 | 0 | 0 | 0 | 0.007 | 0 | 0.001 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.048 | 0 | 0 | 0 | 0.004 | 0 | 0.001 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.100 | 0 | 0 | 0 | 0.003 | 0 | 0.001 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.128 | 0 | 0 | 0 | 0.001 | 0 | 0.001 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.114 | 0 | 0 | 0 | 0 | 0 | 0.001 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.088 | 0 | 0 | 0 | 0 | 0 | 0.001 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.061 | 0 | 0 | 0 | 0 | 0 | 0.001 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.048 | 0 | 0 | 0 | 0 | 0 | 0.001 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.034 | 0 | 0 | 0 | 0 | 0 | 0.001 | --- | --- | 28 |
| 29 | --- | | 0B | 0.030 | 0 | 0 | 0 | 0 | 0 | 0.001 | --- | --- | 29 |
| 30 | --- | | 0B | 0.030 | 0 | 0 | 0 | 0 | 0 | 0.001 | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | 0 | 0 | | 0.001 | | --- | 31 |
| TOTAL | --- | --- | 0 | 2.484 | 0.318 | 0.001 | 0.028 | 1.085 | 0.005 | 0.388 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.082 | 0.010 | 0 | 0.001 | 0.035 | 0 | 0.012 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 1.04 | 0.041 | 0.001 | 0.015 | 0.555 | 0.002 | 0.331 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.017
MAXIMUM DAILY, 1.04B ON APR 16
MINIMUM DAILY, 0B ON MAR 1

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 12 34 N
LONG 98 57 08 W
DRAINAGE AREA, 184 km²

B - ICE CONDITIONS

REGULATED

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 2.81 |
| FEB | --- | AUG | 94.6 |
| MAR | 0 | SEP | 0.43 |
| APR | 212 | OCT | 31.8 |
| MAY | 27.8 | NOV | --- |
| JUN | 0.08 | DEC | --- |

TOTAL DISCHARGE, 369 dam³

## PINE CREEK DIVERSION NEAR PINEY - STATION NO. 08OD027

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.1628 | 0.1708 | 0.1808 | 0.5238 | 1.18 | 0.570 | 3.81 | 0.142 | 0.162 | 0.147 | 0.198 | 0.1288 | 1 |
| 2 | 0.1808 | 0.1778 | 0.1858 | 0.5158 | 1.12 | 0.533 | 3.08 | 0.138 | 0.153 | 0.148 | 0.1988 | 0.1418 | 2 |
| 3 | 0.1588 | 0.1808 | 0.1678 | 0.4868 | 1.02 | 0.503 | 8.11 | 0.142 | 0.148 | 0.147 | 0.1878 | 0.1388 | 3 |
| 4 | 0.1588 | 0.1478 | 0.1328 | 0.5378 | 1.06 | 0.473 | 4.88 | 0.318 | 0.156 | 0.150 | 0.1958 | 0.1388 | 4 |
| 5 | 0.1538 | 0.1428 | 0.1348 | 0.5369 | 1.45 | 0.488 | 3.32 | 0.233 | 0.151 | 0.157 | 0.2088 | 0.1338 | 5 |
| 6 | 0.1618 | 0.1388 | 0.1348 | 0.7518 | 1.14 | 0.488 | 2.48 | 0.178 | 0.148 | 0.181 | 0.2118 | 0.1238 | 6 |
| 7 | 0.1498 | 0.1338 | 0.1318 | 0.7888 | 0.904 | 0.570 | 1.41 | 0.158 | 0.151 | 0.180 | 0.2388 | 0.1108 | 7 |
| 8 | 0.1498 | 0.1338 | 0.1288 | 0.7588 | 0.833 | 0.618 | 0.884 | 0.146 | 0.150 | 0.157 | 0.2288 | 0.1208 | 8 |
| 9 | 0.1578 | 0.1348 | 0.1268 | 0.8108 | 0.773 | 0.638 | 0.667 | 0.143 | 0.148 | 0.180 | 0.2068 | 0.1308 | 9 |
| 10 | 0.1888 | 0.1378 | 0.1338 | 0.8388 | 0.727 | 0.481 | 0.575 | 0.137 | 0.142 | 0.188 | 0.1988 | 0.1408 | 10 |
| 11 | 0.1858 | 0.1478 | 0.1588 | 0.4908 | 0.880 | 0.488 | 0.818 | 0.127 | 0.151 | 0.188 | 0.1888 | 0.1388 | 11 |
| 12 | 0.1628 | 0.1628 | 0.1858 | 0.4388 | 0.883 | 1.12 | 0.736 | 0.132 | 0.188 | 0.184 | 0.1668 | 0.1338 | 12 |
| 13 | 0.1398 | 0.1768 | 0.1888 | 0.4208 | 0.851 | 4.10 | 1.18 | 0.138 | 0.185 | 0.182 | 0.1998 | 0.1308 | 13 |
| 14 | 0.1428 | 0.1888 | 0.1588 | 0.7578 | 0.804 | 4.48 | 0.848 | 0.133 | 0.180 | 0.182 | 0.1848 | 0.1308 | 14 |
| 15 | 0.1408 | 0.2088 | 0.1588 | 2.15 B | 0.803 | 2.94 | 0.503 | 0.128 | 0.183 | 0.187 | 0.1818 | 0.1308 | 15 |
| 16 | 0.1388 | 0.2188 | 0.1648 | 4.51 B | 0.585 | 1.86 | 0.448 | 0.122 | 0.180 | 0.188 | 0.1798 | 0.1308 | 16 |
| 17 | 0.1428 | 0.2188 | 0.1708 | 4.07 B | 0.588 | 0.843 | 0.418 | 0.114 | 0.141 | 0.188 | 0.1858 | 0.1308 | 17 |
| 18 | 0.1448 | 0.2148 | 0.1738 | 3.86 B | 0.628 | 0.823 | 0.388 | 0.121 | 0.138 | 0.158 | 0.2028 | 0.1308 | 18 |
| 19 | 0.1488 | 0.2108 | 0.1768 | 3.28 B | 0.958 | 0.847 | 0.347 | 0.825 | 0.142 | 0.170 | 0.2078 | 0.1308 | 19 |
| 20 | 0.1548 | 0.1928 | 0.1778 | 2.78 B | 1.34 | 0.804 | 0.328 | 1.39 | 0.138 | 0.171 | 0.1938 | 0.1308 | 20 |
| 21 | 0.1608 | 0.1888 | 0.1748 | 2.93 B | 0.982 | 1.38 | 0.307 | 0.488 | 0.148 | 0.174 | 0.1848 | 0.1288 | 21 |
| 22 | 0.1638 | 0.1888 | 0.1858 | 3.08 B | 0.700 | 2.04 | 0.287 | 0.287 | 0.144 | 0.174 | 0.1728 | 0.1268 | 22 |
| 23 | 0.1618 | 0.1738 | 0.1548 | 3.48 B | 0.837 | 1.14 | 0.288 | 0.218 | 0.138 | 0.173 | 0.1828 | 0.1208 | 23 |
| 24 | 0.1538 | 0.1868 | 0.1548 | 3.12 B | 0.851 | 1.88 | 0.252 | 0.187 | 0.141 | 0.188 | 0.1848 | 0.1208 | 24 |
| 25 | 0.1588 | 0.1628 | 0.1528 | 2.93 B | 2.71 | 1.40 | 0.241 | 0.178 | 0.148 | 0.188 | 0.1528 | 0.1308 | 25 |
| 26 | 0.1588 | 0.1548 | 0.1588 | 2.52 B | 2.78 | 0.988 | 0.221 | 0.178 | 0.148 | 0.171 | 0.1528 | 0.1358 | 26 |
| 27 | 0.1588 | 0.1528 | 0.1888 | 2.22 B | 1.88 | 0.878 | 0.194 | 0.183 | 0.144 | 0.188 | 0.1498 | 0.1408 | 27 |
| 28 | 0.1548 | 0.1588 | 0.1758 | 1.83 B | 1.22 | 0.850 | 0.180 | 0.172 | 0.147 | 0.180 | 0.1588 | 0.1458 | 28 |
| 29 | 0.1488 | | 0.3488 | 1.52 | 0.883 | 1.18 | 0.172 | 0.178 | 0.144 | 0.188 | 0.1488 | 0.1518 | 29 |
| 30 | 0.1588 | | 0.5488 | 1.30 | 0.858 | 5.12 | 0.158 | 0.188 | 0.148 | 0.187 | 0.1308 | 0.1538 | 30 |
| 31 | 0.1888 | | 0.5208 | | 0.813 | | 0.147 | 0.184 | | 0.182 | | 0.1488 | 31 |
| TOTAL | 4.783 | 4.783 | 5.650 | 62.884 | 31.428 | 38.853 | 35.241 | 7.438 | 4.485 | 5.198 | 5.837 | 4.103 | TOTAL |
| MEAN | 0.154 | 0.170 | 0.183 | 1.75 | 1.01 | 1.30 | 1.14 | 0.240 | 0.149 | 0.168 | 0.185 | 0.133 | MEAN |
| MAX | 0.188 | 0.218 | 0.620 | 4.51 | 2.78 | 5.12 | 8.11 | 1.39 | 0.185 | 0.193 | 0.238 | 0.183 | MAX |
| MIN | 0.138 | 0.133 | 0.135 | 0.420 | 0.585 | 0.488 | 0.147 | 0.114 | 0.138 | 0.146 | 0.130 | 0.110 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.548
MAXIMUM DAILY, 8.11 ON JUL 3
MINIMUM DAILY, 0.1108 ON DEC 7
MAXIMUM INSTANTANEOUS,
8.35 AT 15:21 CST ON JUL 3

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 01 25 N
LONG 95 58 40 W
DRAINAGE AREA, 188 km²

B - ICE CONDITIONS

REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 413 | JUL | 3 040 |
| FEB | 413 | AUG | 842 |
| MAR | 508 | SEP | 388 |
| APR | 4 570 | OCT | 449 |
| MAY | 2 720 | NOV | 478 |
| JUN | 3 380 | DEC | 384 |

TOTAL DISCHARGE, 17 300 dam³

## PINE CREEK NEAR MELBOURNE - STATION NO. 05LL014

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.0808 | 0.0788 | 0.0868 | 0.3218 | 0.228 | 0.138 | 0.137 | 0.080 | 0.040 | 0.080 | 0.182 | 0.1878 | 1 |
| 2 | 0.0808 | 0.0748 | 0.0878 | 0.4588 | 0.142 | 0.136 | 0.132 | 0.031 | 0.037 | 0.084 | 0.183 | 0.1798 | 2 |
| 3 | 0.0828 | 0.0788 | 0.0848 | 0.5908 | 0.081 | 0.131 | 0.131 | 0.041 | 0.043 | 0.073 | 0.187 | 0.1728 | 3 |
| 4 | 0.0828 | 0.0788 | 0.0828 | 0.5358 | 0.049 | 0.122 | 0.122 | 0.040 | 0.040 | 0.088 | 0.173 | 0.1618 | 4 |
| 5 | 0.0828 | 0.0788 | 0.0828 | 1.63 B | 0.071 | 0.118 | 0.117 | 0.033 | 0.035 | 0.088 | 0.212 | 0.1418 | 5 |
| 6 | 0.0818 | 0.0778 | 0.0828 | 1.33 | 0.080 | 0.118 | 0.112 | 0.021 | 0.038 | 0.083 | 0.201 | 0.1228 | 6 |
| 7 | 0.0788 | 0.0778 | 0.0868 | 0.887 | 0.188 | 0.124 | 0.108 | 0.032 | 0.038 | 0.078 | 0.188 | 0.0888 | 7 |
| 8 | 0.0808 | 0.0788 | 0.0848 | 0.774 | 0.180 | 0.123 | 0.108 | 0.034 | 0.038 | 0.086 | 0.215 | 0.1088 | 8 |
| 9 | 0.0818 | 0.0798 | 0.0878 | 0.841 | 0.141 | 0.118 | 0.118 | 0.032 | 0.038 | 0.087 | 0.213 | 0.1208 | 9 |
| 10 | 0.0818 | 0.0818 | 0.0718 | 0.616 | 0.111 | 0.114 | 0.117 | 0.038 | 0.038 | 0.078 | 0.204 | 0.1118 | 10 |
| 11 | 0.0788 | 0.0788 | 0.0718 | 0.388 | 0.088 | 0.114 | 0.118 | 0.044 | 0.088 | 0.088 | 0.201 | 0.1078 | 11 |
| 12 | 0.0788 | 0.0788 | 0.0818 | 0.347 | 0.084 | 0.124 | 0.108 | 0.083 | 0.083 | 0.085 | 0.202 | 0.0978 | 12 |
| 13 | 0.0788 | 0.0808 | 0.0828 | 0.367 | 0.070 | 0.144 | 0.103 | 0.082 | 0.082 | 0.070 | 0.195 | 0.0828 | 13 |
| 14 | 0.0788 | 0.0818 | 0.0858 | 0.337 | 0.082 | 0.182 | 0.103 | 0.088 | 0.080 | 0.085 | 0.1918 | 0.0888 | 14 |
| 15 | 0.0788 | 0.0818 | 0.0898 | 0.376 | 0.081 | 0.188 | 0.100 | 0.084 | 0.083 | 0.075 | 0.1848 | 0.0888 | 15 |
| 16 | 0.0788 | 0.0808 | 0.0878 | 0.382 | 0.080 | 0.180 | 0.098 | 0.083 | 0.046 | 0.073 | 0.1778 | 0.0828 | 16 |
| 17 | 0.0748 | 0.0818 | 0.0868 | 0.338 | 0.080 | 0.144 | 0.098 | 0.083 | 0.044 | 0.087 | 0.1908 | 0.0488 | 17 |
| 18 | 0.0748 | 0.0848 | 0.0858 | 0.332 | 0.087 | 0.140 | 0.097 | 0.088 | 0.045 | 0.100 | 0.1898 | 0.0438 | 18 |
| 19 | 0.0738 | 0.0848 | 0.0848 | 0.328 | 0.078 | 0.143 | 0.095 | 0.088 | 0.083 | 0.121 | 0.2088 | 0.0518 | 19 |
| 20 | 0.0718 | 0.0788 | 0.0838 | 0.328 | 0.085 | 0.138 | 0.088 | 0.088 | 0.081 | 0.122 | 0.2118 | 0.0828 | 20 |
| 21 | 0.0718 | 0.0788 | 0.0828 | 0.332 | 0.080 | 0.131 | 0.093 | 0.088 | 0.081 | 0.121 | 0.2088 | 0.0838 | 21 |
| 22 | 0.0738 | 0.0788 | 0.0838 | 0.320 | 0.103 | 0.130 | 0.083 | 0.088 | 0.083 | 0.118 | 0.2088 | 0.0838 | 22 |
| 23 | 0.0738 | 0.0828 | 0.0838 | 0.302 | 0.111 | 0.128 | 0.078 | 0.088 | 0.070 | 0.113 | 0.2028 | 0.0398 | 23 |
| 24 | 0.0888 | 0.0788 | 0.0838 | 0.272 | 0.107 | 0.128 | 0.081 | 0.083 | 0.081 | 0.118 | 0.1978 | 0.0488 | 24 |
| 25 | 0.0708 | 0.0738 | 0.1008 | 0.220 | 0.127 | 0.135 | 0.088 | 0.049 | 0.080 | 0.124 | 0.1888 | 0.0888 | 25 |
| 26 | 0.0728 | 0.0888 | 0.1328 | 0.174 | 0.118 | 0.138 | 0.082 | 0.047 | 0.070 | 0.133 | 0.1958 | 0.0898 | 26 |
| 27 | 0.0788 | 0.0888 | 0.1528 | 0.143 | 0.130 | 0.144 | 0.085 | 0.048 | 0.083 | 0.146 | 0.1898 | 0.0848 | 27 |
| 28 | 0.0788 | 0.0898 | 0.1218 | 0.101 | 0.183 | 0.147 | 0.087 | 0.052 | 0.080 | 0.148 | 0.1748 | 0.0888 | 28 |
| 29 | 0.0788 | | 0.1108 | 0.084 | 0.173 | 0.148 | 0.088 | 0.051 | 0.080 | 0.182 | 0.1818 | 0.0878 | 29 |
| 30 | 0.0788 | | 0.1118 | 0.119 | 0.142 | 0.148 | 0.083 | 0.038 | 0.047 | 0.157 | 0.1808 | 0.0718 | 30 |
| 31 | 0.0788 | | 0.3008 | | 0.160 | | 0.080 | 0.038 | | 0.149 | | 0.0738 | 31 |
| TOTAL | 2.383 | 2.150 | 2.889 | 13.784 | 3.372 | 4.039 | 3.030 | 1.480 | 1.839 | 3.132 | 5.773 | 2.708 | TOTAL |
| MEAN | 0.077 | 0.077 | 0.088 | 0.459 | 0.108 | 0.135 | 0.088 | 0.048 | 0.081 | 0.101 | 0.182 | 0.087 | MEAN |
| MAX | 0.082 | 0.084 | 0.200 | 1.63 | 0.238 | 0.182 | 0.137 | 0.082 | 0.081 | 0.182 | 0.215 | 0.187 | MAX |
| MIN | 0.069 | 0.069 | 0.083 | 0.084 | 0.049 | 0.114 | 0.080 | 0.021 | 0.028 | 0.080 | 0.152 | 0.039 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.126
MAXIMUM DAILY, 1.630 ON APR 5
MINIMUM DAILY, 0.021 ON AUG 5
MAXIMUM INSTANTANEOUS,
2.180 AT 10:34 CST ON APR 5

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 54 00 N
LONG 99 13 30 W
DRAINAGE AREA, 233 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 208 | JUL | 263 |
| FEB | 188 | AUG | 128 |
| MAR | 231 | SEP | 133 |
| APR | 1 180 | OCT | 271 |
| MAY | 291 | NOV | 488 |
| JUN | 348 | DEC | 234 |

TOTAL DISCHARGE, 3 870 dam³

## PINE CREEK NEAR PINE CREEK STATION - STATION NO. 05LL007

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.2878 | 0.4448 | 1.28 | 0.888 | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | 0.2888 | 0.8018 | 1.18 | 0.888 | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | 0.2888 | 1.08 B | 1.02 | 0.488 | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | 0.2828 | 1.84 B | 1.05 | 0.424A | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | 0.3018 | 3.21 B | 1.01 | 0.387E | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | 0.3108 | 3.88 B | 0.803 | 0.413A | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | 0.3188 | 3.45 B | 0.778 | 0.430 | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | 0.3228 | 3.30 B | 0.888 | 0.528 | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | 0.3258 | 3.34 B | 0.888 | 0.558 | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | 0.3338 | 3.10 B | 0.848 | 0.555 | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | 0.3278 | 2.88 B | 0.888 | 0.481 | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | 0.3188 | 2.48 B | 0.831 | 0.888 | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | 0.3108 | 2.23 B | 0.872 | 1.80 | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | 0.3078 | 2.30 B | 0.482 | 3.64 | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | 0.2898 | 2.42 B | 0.448 | 3.38 | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | 0.2878 | 2.87 B | 0.424 | 2.73 | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | 0.2808 | 2.74 B | 0.876 | 1.73 | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | 0.2778 | 2.68 B | 0.818 | 1.28 | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | 0.2758 | 2.86 B | 0.842 | 1.07 | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | 0.2838 | 2.87 B | 0.480 | 0.831 | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | 0.2898 | 2.37 B | 0.402 | 0.828 | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | 0.3018 | 2.18 B | 0.342 | 0.828 | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | 0.3068 | 2.18 B | 0.290 | 0.888 | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | 0.3178 | 2.13 B | 0.277 | 0.430E | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | 0.3198 | 2.12 | 0.274 | 0.409E | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | 0.3218 | 2.23 | 0.437 | 0.382E | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | 0.3258 | 2.01 | 0.862 | 0.340E | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | 0.3308 | 1.70 | 0.772 | 0.324E | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | 0.3268 | 1.48 | 0.758 | 0.373E | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | 0.3488 | 1.34 | 0.831 | 0.888 | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | 0.3698 | | 0.817 | | --- | --- | | --- | | --- | 31 |
| TOTAL | --- | --- | 9.602 | 89.778 | 20.235 | 25.831 | --- | --- | --- | --- | --- | --- | TOTAL |
| MEAN | --- | --- | 0.310 | 2.33 | 0.653 | 0.854 | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | 0.369 | 3.88 | 1.28 | 3.38 | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | 0.278 | 0.444 | 0.274 | 0.324 | --- | --- | --- | --- | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 1.03
MAXIMUM DAILY, 3.888 ON APR 5
MINIMUM DAILY, 0.274 ON MAY 25
MAXIMUM INSTANTANEOUS,
4.118 AT 12:58 CST ON APR 5

SUMMARY FOR THE MONTHS MAR TO JUN

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 03 40 N
LONG 98 55 49 W
DRAINAGE AREA, 835 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | --- |
| FEB | --- | AUG | --- |
| MAR | 830 | SEP | --- |
| APR | 6 030 | OCT | --- |
| MAY | 1 750 | NOV | --- |
| JUN | 2 270 | DEC | --- |

TOTAL DISCHARGE, 10 880 dam³

## PIPESTONE CREEK NEAR PIPESTONE - STATION NO. 05MG003

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0B | 0B | 0B | 0.8488 | 0.031 | 0.002 | 0.003 | 0 | 0 | 0 | 0 | 0B | 1 |
| 2 | 0B | 0B | 0B | 4.44 B | 0.018 | 0.001 | 0.003 | 0 | 0 | 0 | 0 | 0B | 2 |
| 3 | 0B | 0B | 0B | 3.62 B | 0.011 | 0.001 | 0.002 | 0 | 0 | 0 | 0 | 0B | 3 |
| 4 | 0B | 0B | 0B | 1.48 B | 0.018 | 0.001 | 0.002 | 0 | 0 | 0 | 0 | 0B | 4 |
| 5 | 0B | 0B | 0B | 0.8898 | 0.038 | 0.001 | 0.002 | 0 | 0 | 0 | 0 | 0B | 5 |
| 6 | 0B | 0B | 0B | 0.7778 | 0.028 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | 0B | 6 |
| 7 | 0B | 0B | 0B | 0.6018 | 0.028 | 0.002 | 0.001 | 0 | 0 | 0 | 0 | 0B | 7 |
| 8 | 0B | 0B | 0B | 0.4748 | 0.024 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | 0B | 8 |
| 9 | 0B | 0B | 0B | 0.4188 | 0.021 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | 0B | 9 |
| 10 | 0B | 0B | 0B | 0.3878 | 0.017 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0B | 10 |
| 11 | 0B | 0B | 0B | 0.3738 | 0.013 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0B | 11 |
| 12 | 0B | 0B | 0B | 0.3648 | 0.012 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0B | 12 |
| 13 | 0B | 0B | 0B | 0.3208 | 0.013 | 0.003 | 0 | 0 | 0 | 0 | 0B | 0B | 13 |
| 14 | 0B | 0B | 0B | 0.2648 | 0.014 | 0.003 | 0 | 0 | 0 | 0 | 0B | 0B | 14 |
| 15 | 0B | 0B | 0B | 0.2248 | 0.014 | 0.001 | 0 | 0 | 0 | 0 | 0B | 0B | 15 |
| 16 | 0B | 0B | 0B | 0.1778 | 0.014 | 0.001 | 0 | 0 | 0 | 0 | 0B | 0B | 16 |
| 17 | 0B | 0B | 0B | 0.1448 | 0.014 | 0.018 | 0 | 0 | 0 | 0 | 0B | 0B | 17 |
| 18 | 0B | 0B | 0B | 0.1328 | 0.012 | 0.046 | 0 | 0 | 0 | 0 | 0B | 0B | 18 |
| 19 | 0B | 0B | 0B | 0.121 | 0.008 | 0.008 | 0 | 0 | 0 | 0 | 0B | 0B | 19 |
| 20 | 0B | 0B | 0B | 0.130 | 0.008 | 0.001 | 0 | 0 | 0 | 0 | 0B | 0B | 20 |
| 21 | 0B | 0B | 0B | 0.133 | 0.004 | 0.001 | 0 | 0 | 0 | 0 | 0B | 0B | 21 |
| 22 | 0B | 0B | 0B | 0.112 | 0.003 | 0.001 | 0 | 0 | 0 | 0 | 0B | 0B | 22 |
| 23 | 0B | 0B | 0B | 0.087 | 0.003 | 0.001 | 0 | 0 | 0 | 0 | 0B | 0B | 23 |
| 24 | 0B | 0B | 0B | 0.088 | 0.006 | 0.001 | 0 | 0 | 0 | 0 | 0B | 0B | 24 |
| 25 | 0B | 0B | 0B | 0.069 | 0.009 | 0.012 | 0 | 0 | 0 | 0 | 0B | 0B | 25 |
| 26 | 0B | 0B | 0B | 0.073 | 0.007 | 0.003 | 0 | 0 | 0 | 0 | 0B | 0B | 26 |
| 27 | 0B | 0B | 0B | 0.060 | 0.004 | 0.002 | 0 | 0 | 0 | 0 | 0B | 0B | 27 |
| 28 | 0B | 0B | 0B | 0.058 | 0.004 | 0.003 | 0 | 0 | 0 | 0 | 0B | 0B | 28 |
| 29 | 0B | | 0B | 0.048 | 0.003 | 0.005 | 0 | 0 | 0 | 0 | 0B | 0B | 29 |
| 30 | 0B | | 0B | 0.038 | 0.002 | 0.003 | 0 | 0 | 0 | 0 | 0B | 0B | 30 |
| 31 | 0B | | 0B | | 0.002 | | 0 | 0 | | 0 | | 0B | 31 |
| TOTAL | 0 | 0 | 0 | 17.068 | 0.384 | 0.128 | 0.018 | 0 | 0 | 0 | 0 | 0 | TOTAL |
| MEAN | 0 | 0 | 0 | 0.550 | 0.012 | 0.004 | 0.001 | 0 | 0 | 0 | 0 | 0 | MEAN |
| MAX | 0 | 0 | 0 | 4.44 | 0.038 | 0.046 | 0.003 | 0 | 0 | 0 | 0 | 0 | MAX |
| MIN | 0 | 0 | 0 | 0.038 | 0.002 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.045
MAXIMUM DAILY, 4.448 ON APR 2
MINIMUM DAILY, 0B ON JAN 1
MAXIMUM INSTANTANEOUS,
5.018 AT 04:28 CST ON APR 2

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 35 40 N
LONG 100 58 30 W
DRAINAGE AREA, 4 200 km²

B - ICE CONDITIONS

REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 0 | JUL | 1.38 |
| FEB | 0 | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 1 470 | OCT | 0 |
| MAY | 33.2 | NOV | 0 |
| JUN | 11.1 | DEC | 0 |

TOTAL DISCHARGE, 1 520 dam³

## PIPESTONE CREEK NEAR THE SASKATCHEWAN BOUNDARY - STATION NO. 05NE024

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 08 | 08 | 0 B | 0.5578 | 0.038 | 0 | 0 | 0 | 0 | 0.101 | 0.0038 | 0.0038 | 1 |
| 2 | 08 | 08 | 0 B | 0.4188 | 0.038 | 0 | 0 | 0 | 0 | 0.074 | 0.0038 | 0.0038 | 2 |
| 3 | 08 | 08 | 0 B | 0.3088 | 0.034 | 0 | 0 | 0 | 0 | 0.038 | 0.0038 | 0.0038 | 3 |
| 4 | 08 | 08 | 0 B | 0.2508 | 0.036 | 0 | 0 | 0 | 0 | 0.031 | 0.0058 | 0.0038 | 4 |
| 5 | 08 | 08 | 0 B | 0.2778 | 0.032 | 0 | 0 | 0 | 0 | 0.082 | 0.0088 | 0.0038 | 5 |
| 6 | 08 | 08 | 0 B | 0.2478 | 0.027 | 0 | 0 | 0 | 0 | 0.057 | 0.0068 | 0.0028 | 6 |
| 7 | 08 | 08 | 0 B | 0.1838 | 0.026 | 0 | 0 | 0 | 0 | 0.084 | 0.0058 | 0.0028 | 7 |
| 8 | 08 | 08 | 0 B | 0.0888 | 0.024 | 0 | 0 | 0 | 0.428 | 0.053 | 0.0068 | 0.0018 | 8 |
| 9 | 08 | 08 | 0 B | 0.0838 | 0.026 | 0 | 0 | 0 | 0.448 | 0.048 | 0.0068 | 0.0028 | 9 |
| 10 | 08 | 08 | 0 B | 0.0888 | 0.020 | 0 | 0 | 0 | 0.230 | 0.039 | 0.0068 | 0.0018 | 10 |
| 11 | 08 | 08 | 0 B | 0.0848 | 0.011 | 0 | 0 | 0 | 0.153 | 0.027 | 0.0048 | 0.0028 | 11 |
| 12 | 08 | 08 | 0 B | 0.0488 | 0.007 | 0 | 0 | 0 | 0.085 | 0.024 | 0.0048 | 0.0028 | 12 |
| 13 | 08 | 08 | 0.0248 | 0.0518 | 0.008 | 0 | 0 | 0 | 0.038 | 0.021 | 0.0068 | 0.0028 | 13 |
| 14 | 08 | 08 | 0.0418 | 0.0518 | 0.006 | 0 | 0 | 0 | 0.013 | 0.017 | 0.0048 | 0.0028 | 14 |
| 15 | 08 | 08 | 0.0498 | 0.052 | 0.005 | 0 | 0 | 0 | 0.007 | 0.006 | 0.0048 | 0.0028 | 15 |
| 16 | 08 | 08 | 0.0488 | 0.055 | 0.004 | 0 | 0 | 0 | 0.005 | 0.002 | 0.0048 | 0.0028 | 16 |
| 17 | 08 | 08 | 0.0928 | 0.048 | 0.008 | 0 | 0 | 0 | 0.003 | 0 | 0.0068 | 0.0028 | 17 |
| 18 | 08 | 08 | 0.0968 | 0.043 | 0.006 | 0 | 0 | 0 | 0.002 | 0 | 0.0048 | 0 B | 18 |
| 19 | 08 | 08 | 0.0848 | 0.043 | 0.006 | 0 | 0 | 0 | 0.002 | 0 | 0.0048 | 0 B | 19 |
| 20 | 08 | 08 | 0.0738 | 0.036 | 0.005 | 0 | 0 | 0 | 0.003 | 0 | 0.0048 | 0 B | 20 |
| 21 | 08 | 08 | 0.0838 | 0.032 | 0.003 | 0 | 0 | 0 | 0.003 | 0 | 0.0068 | 0 B | 21 |
| 22 | 08 | 08 | 0.0858 | 0.027 | 0.002 | 0 | 0 | 0 | 0.400 | 0 | 0.0068 | 0 B | 22 |
| 23 | 08 | 08 | 0.0878 | 0.028 | 0.001 | 0 | 0 | 0 | 0.578 | 0 | 0.0068 | 0 B | 23 |
| 24 | 08 | 08 | 0.0708 | 0.037 | 0.002 | 0 | 0 | 0 | 0.508 | 0 | 0.0068 | 0 B | 24 |
| 25 | 08 | 08 | 0.2148 | 0.037 | 0.003 | 0 | 0 | 0 | 0.348 | 0 | 0.0068 | 0 B | 25 |
| 26 | 08 | 08 | 0.3348 | 0.040 | 0.002 | 0 | 0 | 0 | 0.310 | 0 | 0.0048 | 0 B | 26 |
| 27 | 08 | 08 | 0.5138 | 0.045 | 0 | 0 | 0 | 0 | 0.308 | 0.003 | 0.0048 | 0 B | 27 |
| 28 | 08 | 08 | 0.2868 | 0.041 | 0 | 0 | 0 | 0 | 0.321 | 0.004 | 0.0048 | 0 B | 28 |
| 29 | 08 | | 0.2548 | 0.038 | 0 | 0 | 0 | 0 | 0.305 | 0.004 | 0.0038 | 0 B | 29 |
| 30 | 08 | | 0.2788 | 0.033 | 0 | 0 | 0 | 0 | 0.184 | 0.004 | 0.0038 | 0 B | 30 |
| 31 | 08 | | 0.2838 | | 0 | | 0 | 0 | | 0.003 | | 0 B | 31 |
| TOTAL | 0 | 0 | 2.882 | 3.332 | 0.370 | 0 | 0 | 0 | 4.887 | 0.873 | 0.132 | 0.035 | TOTAL |
| MEAN | 0 | 0 | 0.083 | 0.111 | 0.012 | 0 | 0 | 0 | 0.158 | 0.022 | 0.004 | 0.001 | MEAN |
| MAX | 0 | 0 | 0.513 | 0.557 | 0.036 | 0 | 0 | 0 | 0.578 | 0.101 | 0.008 | 0.003 | MAX |
| MIN | 0 | 0 | 0 | 0.027 | 0 | 0 | 0 | 0 | 0 | 0 | 0.003 | 0 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.033
MAXIMUM DAILY, 0.578 ON SEP 23
MINIMUM DAILY, 08 ON JAN 1
MAXIMUM INSTANTANEOUS,
0.8388 AT 00:15 CST ON MAR 27

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 50 28 N
LONG 101 23 48 W
DRAINAGE AREA, 3 880 km²

B - ICE CONDITIONS

REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 0 | JUL | 0 |
| FEB | 0 | AUG | 0 |
| MAR | 250 | SEP | 405 |
| APR | 278 | OCT | 86.1 |
| MAY | 33.0 | NOV | 11.4 |
| JUN | 0 | DEC | 3.02 |

TOTAL DISCHARGE, 1 060 dam³

## PLAYGREEN LAKE AT ENTRANCE TO EAST NELSON RIVER - STATION NO. 05UB005

DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | 216.858 | --- | 216.861 | --- | --- | 217.088 | --- | 216.721 | 216.630 | 1 |
| 2 | --- | --- | --- | 216.858 | --- | 216.832 | --- | --- | 217.103 | --- | 216.716 | 216.578 | 2 |
| 3 | --- | --- | 216.638A | 216.856 | --- | 216.811 | --- | --- | --- | --- | 216.810 | 216.804 | 3 |
| 4 | 216.486A | --- | 216.831 | 216.858 | --- | 216.803 | --- | --- | --- | --- | 216.800 | 216.618 | 4 |
| 5 | 216.462 | --- | 216.834 | 216.886 | --- | 216.973 | --- | --- | --- | --- | 216.788 | 216.607 | 5 |
| 6 | 216.441 | --- | 216.834 | 216.880 | --- | 216.844 | --- | --- | --- | --- | 216.773 | 216.804 | 6 |
| 7 | 216.449 | --- | 216.848 | 216.880 | --- | --- | --- | --- | --- | --- | 216.833 | 216.804 | 7 |
| 8 | 216.450 | --- | 216.869 | 216.869A | --- | --- | --- | --- | --- | --- | 216.748 | 216.802 | 8 |
| 9 | 216.438 | --- | 216.866 | 216.863A | --- | --- | --- | --- | --- | --- | 216.740 | 216.590 | 9 |
| 10 | 216.436 | --- | 216.870 | 216.878 | 216.871A | --- | --- | 217.194A | --- | --- | 216.781 | 216.588 | 10 |
| 11 | 216.428 | --- | 216.862 | 216.877 | 216.821A | --- | 217.118A | 217.192 | --- | 216.826A | 216.848 | 216.587 | 11 |
| 12 | 216.426 | --- | 216.868 | 216.888 | 216.840 | --- | --- | 217.168 | --- | 216.828 | 216.847 | 216.881 | 12 |
| 13 | 216.442 | --- | 216.884 | 216.898 | 216.820 | --- | --- | 217.084 | --- | 216.781 | 216.849 | 216.587 | 13 |
| 14 | 216.444 | --- | 216.887 | 216.899 | 216.885 | --- | --- | 217.116 | --- | 216.802 | 216.848 | 216.586 | 14 |
| 15 | 216.441 | --- | 216.886 | 216.918 | 216.887 | --- | --- | 217.163 | --- | 216.794 | 216.822 | 216.588 | 15 |
| 16 | 216.451 | --- | 216.880 | 216.711 | 216.898 | --- | --- | 217.187 | --- | 216.780 | 216.894 | 216.884 | 16 |
| 17 | 216.446 | --- | 216.887 | --- | 216.814 | --- | --- | 217.202 | --- | 216.811 | 216.804 | 216.547 | 17 |
| 18 | 216.455 | --- | 216.887 | --- | 216.838 | --- | --- | 217.280 | --- | 216.801 | 216.812 | 216.848 | 18 |
| 19 | 216.483 | --- | 216.903 | --- | 216.841 | --- | --- | 217.098 | --- | 217.084 | 216.848 | 216.540 | 19 |
| 20 | 216.486 | --- | 216.909 | --- | 216.868A | --- | --- | 217.018 | --- | 216.848 | 216.806 | 216.838 | 20 |
| 21 | 216.478 | --- | 216.912 | --- | 216.868A | --- | --- | 217.138 | --- | 216.844 | 216.887 | 216.838 | 21 |
| 22 | 216.477 | --- | 216.911 | --- | 216.868 | --- | --- | 217.133 | --- | 216.848 | 216.828 | 216.838 | 22 |
| 23 | 216.480 | --- | 216.914 | --- | 216.827 | --- | --- | 217.126 | --- | 216.895 | 216.898 | 216.838 | 23 |
| 24 | 216.483 | --- | 216.927 | --- | 216.880 | --- | --- | 217.216 | --- | 216.895 | 216.821 | 216.833 | 24 |
| 25 | 216.484 | --- | 216.932 | --- | 216.804 | --- | --- | 217.238 | --- | 216.838 | 216.834 | 216.818 | 25 |
| 26 | --- | --- | 216.918 | --- | 216.718 | --- | --- | 217.234 | --- | 216.872 | 216.833 | 216.818 | 26 |
| 27 | --- | --- | 216.917 | --- | 216.822 | --- | --- | 217.188 | --- | 216.738 | 216.826 | 216.818 | 27 |
| 28 | --- | --- | 216.913 | --- | 216.828 | --- | --- | 217.133 | --- | 216.832 | 216.826 | 216.806 | 28 |
| 29 | --- | | 216.917 | --- | 216.874 | --- | --- | 217.028 | --- | 216.787 | 216.882 | 216.803 | 29 |
| 30 | --- | | 216.927 | --- | 216.844 | --- | --- | 217.048 | --- | 216.760 | 216.842 | 216.803 | 30 |
| 31 | --- | | 216.943 | | 216.838 | | --- | 217.078 | | 216.773 | | 216.803 | 31 |
| MEAN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 216.861 | 216.686 | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 216.910 | 216.820 | MAX |
| MIN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 216.804 | 216.802 | MIN |

WATER LEVELS IN METRES

MINIMUM DAILY, 216.426 ON JAN 11

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 53 54 16 N
LONG 97 58 30 W

A - MANUAL GAUGE

REGULATED

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1978 ADJ.)

## PLEASANT VALLEY CREEK NEAR GRANDVIEW - STATION NO. 05LJ031

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.0408 | 0.3048 | 0.013 | 0.048 | 0.040 | 0.102 | 0.110 | 0.010 | --- | --- | 1 |
| 2 | --- | --- | 0.0408 | 0.7288 | 0.018 | 0.052 | 0.035 | 0.093 | 0.106 | 0.011 | --- | --- | 2 |
| 3 | --- | --- | 0.0408 | 0.3418 | 0.010 | 0.042 | 0.028 | 0.106 | 0.114 | 0.013 | --- | --- | 3 |
| 4 | --- | --- | 0.0408 | 0.2008 | 0.010 | 0.040 | 0.434 | 0.128 | 0.148 | 0.014 | --- | --- | 4 |
| 5 | --- | --- | 0.0408 | 0.1888 | 0.010 | 0.043 | 0.891 | 0.140 | 0.144 | 0.014 | --- | --- | 5 |
| 6 | --- | --- | 0.0408 | 0.0888 | 0.008 | 0.048 | 0.410 | 0.122 | 0.178 | 0.012 | --- | --- | 6 |
| 7 | --- | --- | 0.0408 | 0.0338 | 0.010 | 0.102 | 0.318 | 0.138 | 0.188 | 0.011 | --- | --- | 7 |
| 8 | --- | --- | 0.0278 | 0.0228 | 0.007 | 0.070 | 0.332 | 0.178 | 0.178 | 0.008 | --- | --- | 8 |
| 9 | --- | --- | 0.0278 | 0.0188 | 0.007 | 0.052 | 0.381 | 0.282 | 0.188 | 0.008 | --- | --- | 9 |
| 10 | --- | --- | 0.0348 | 0.0208 | 0.007 | 0.044 | 0.318 | 0.184 | 0.148 | 0.008 | --- | --- | 10 |
| 11 | --- | --- | 0.0388 | 0.0288 | 0.183 | 0.087 | 0.388 | 0.231 | 0.148 | 0.010 | --- | --- | 11 |
| 12 | --- | --- | 0.0328 | 0.1138 | 0.471 | 0.218 | 0.445 | 0.381 | 0.143 | 0.010 | --- | --- | 12 |
| 13 | --- | --- | 0.0308 | 0.2438 | 0.318 | 0.188 | 0.338 | 0.388 | 0.140 | 0.010 | --- | --- | 13 |
| 14 | --- | --- | 0.0288 | 0.2248 | 0.204 | 0.088 | 0.338 | 0.374 | 0.084 | 0.013 | --- | --- | 14 |
| 15 | --- | --- | 0.0288 | 0.1778 | 0.188 | 0.080 | 0.340 | 0.370 | 0.048 | 0.020 | --- | --- | 15 |
| 16 | --- | --- | 0.0288 | 0.158 | 0.180 | 0.086 | 0.343 | 0.388 | 0.044 | 0.021 | --- | --- | 16 |
| 17 | --- | --- | 0.0288 | 0.178 | 0.173 | 0.048 | 0.334 | 0.382 | 0.044 | 0.021 | --- | --- | 17 |
| 18 | --- | --- | 0.0328 | 0.080 | 0.124 | 0.034 | 0.282 | 0.380 | 0.040 | 0.017 | --- | --- | 18 |
| 19 | --- | --- | 0.0318 | 0.088 | 0.120 | 0.027 | 0.171 | 0.380 | 0.041 | 0.015 | --- | --- | 19 |
| 20 | --- | --- | 0.0338 | 0.083 | 0.128 | 0.023 | 0.187 | 0.344 | 0.034 | 0.011 | --- | --- | 20 |
| 21 | --- | --- | 0.0488 | 0.088 | 0.095 | 0.017 | 0.188 | 0.343 | 0.018 | 0.010 | --- | --- | 21 |
| 22 | --- | --- | 0.0568 | 0.080 | 0.082 | 0.017 | 0.188 | 0.271 | 0.014 | 0.010 | --- | --- | 22 |
| 23 | --- | --- | 0.0558 | 0.082 | 0.044 | 0.013 | 0.187 | 0.304 | 0.021 | 0.010 | --- | --- | 23 |
| 24 | --- | --- | 0.0518 | 0.085 | 0.080 | 0.012 | 0.138 | 0.224 | 0.018 | 0.008 | --- | --- | 24 |
| 25 | --- | --- | 0.0518 | 0.085 | 0.118 | 0.017 | 0.138 | 0.208 | 0.020 | 0.009 | --- | --- | 25 |
| 26 | --- | --- | 0.0838 | 0.044 | 0.088 | 0.031 | 0.110 | 0.144 | 0.020 | 0.010 | --- | --- | 26 |
| 27 | --- | --- | 0.1888 | 0.034 | 0.074 | 0.084 | 0.072 | 0.144 | 0.018 | 0.021 | --- | --- | 27 |
| 28 | --- | --- | 0.0878 | 0.018 | 0.084 | 0.081 | 0.078 | 0.112 | 0.018 | 0.024 | --- | --- | 28 |
| 29 | --- | | 0.0248 | 0.017 | 0.088 | 0.081 | 0.088 | 0.188 | 0.018 | 0.0208 | --- | --- | 29 |
| 30 | --- | | 0.0198 | 0.018 | 0.088 | 0.048 | 0.088 | 0.122 | 0.014 | 0.0188 | --- | --- | 30 |
| 31 | --- | | 0.0288 | | 0.088 | | 0.080 | 0.108 | | 0.0138 | | --- | 31 |
| TOTAL | --- | --- | 1.387 | 3.821 | 2.884 | 1.773 | 7.332 | 8.980 | 2.389 | 0.418 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.045 | 0.121 | 0.088 | 0.059 | 0.237 | 0.225 | 0.080 | 0.013 | --- | --- | MEAN |
| MAX | --- | --- | 0.188 | 0.728 | 0.471 | 0.218 | 0.891 | 0.380 | 0.188 | 0.024 | --- | --- | MAX |
| MIN | --- | --- | 0.018 | 0.018 | 0.007 | 0.012 | 0.028 | 0.083 | 0.014 | 0.008 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

### SUMMARY FOR THE MONTHS MAR TO OCT

MEAN, 0.110
MAXIMUM DAILY, 0.7288 ON APR 2
MINIMUM DAILY, 0.007 ON MAY 6
MAXIMUM INSTANTANEOUS,
1.388 AT 10:47 CST ON APR 2

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 08 16 N
LONG 100 53 57 W
DRAINAGE AREA, 381 km²

B - ICE CONDITIONS

REGULATED SINCE 1972

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 633 |
| FEB | --- | AUG | 803 |
| MAR | 120 | SEP | 207 |
| APR | 313 | OCT | 36.8 |
| MAY | 286 | NOV | --- |
| JUN | 153 | DEC | --- |

TOTAL DISCHARGE, 2 320 dam³

## PLEASANT VALLEY RESERVOIR NEAR PETLURA - STATION NO. 05LJ008

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 539.628E | 539.662E | 539.851E | 539.487 | 539.303 | 539.238E | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 539.626 | 539.565 | 539.648E | 539.487 | 539.288E | 539.227E | --- | --- | 2 |
| 3 | --- | --- | --- | 539.551 | 539.625E | 539.557E | 539.641E | 539.472E | 539.283E | 539.224 | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 539.641E | 539.550E | 539.636 | 539.477 | 539.288E | 539.221E | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 539.648 | 539.542E | 539.629E | 539.488E | 539.283 | 539.217E | --- | --- | 5 |
| 6 | --- | --- | --- | --- | 539.643E | 539.535 | 539.623E | 539.488E | 539.288E | 539.214 | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 539.638E | 539.585 | 539.616 | 539.448E | 539.280E | 539.212E | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 539.633E | 539.558E | 539.615E | 539.440E | 539.293 | 539.208E | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 539.628 | 539.555 | 539.618E | 539.431E | 539.281E | 539.207E | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 539.618E | 539.568E | 539.618E | 539.421E | 539.288E | 539.204 | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 539.607E | 539.615E | 539.618 | 539.412E | 539.288E | 539.204E | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 539.597 | 539.645E | 539.606E | 539.403E | 539.283 | 539.204E | --- | 539.256 | 12 |
| 13 | --- | --- | 539.489 | --- | 539.587E | 539.675 | 539.598E | 539.393E | 539.278E | 539.204 | --- | --- | 13 |
| 14 | --- | --- | 539.488 | --- | 539.577E | 539.698E | 539.586 | 539.384E | 539.270E | 539.204E | --- | --- | 14 |
| 15 | --- | --- | --- | --- | 539.567E | 539.662E | 539.578E | 539.376 | 539.263 | 539.204E | --- | --- | 15 |
| 16 | --- | --- | --- | --- | 539.557 | 539.655 | 539.571E | 539.368E | 539.261E | 539.204E | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 539.543E | 539.650E | 539.564E | 539.360E | 539.258E | 539.204 | --- | --- | 17 |
| 18 | --- | --- | --- | --- | 539.527 | 539.645E | 539.556 | 539.353 | 539.258E | 539.201E | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 539.527E | 539.640E | 539.549E | 539.348E | 539.254 | 539.197E | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 539.527E | 539.636 | 539.543E | 539.343E | 539.251E | 539.194 | --- | --- | 20 |
| 21 | --- | --- | --- | --- | 539.528E | 539.628E | 539.536 | 539.338E | 539.247E | 539.197E | 539.249 | --- | 21 |
| 22 | --- | --- | --- | --- | 539.528E | 539.628E | 539.528E | 539.333 | 539.244 | 539.201E | --- | --- | 22 |
| 23 | --- | --- | --- | --- | 539.526 | 539.636 | 539.518E | 539.328E | 539.244E | 539.204 | --- | --- | 23 |
| 24 | --- | --- | --- | --- | 539.730E | 539.641E | 539.508E | 539.320E | 539.244E | 539.204E | --- | --- | 24 |
| 25 | 539.884 | --- | --- | 539.639 | 539.563E | 539.648E | 539.488 | 539.313 | 539.244E | 539.203 | --- | --- | 25 |
| 26 | --- | --- | --- | 539.636E | 539.586 | 539.661E | 539.490E | 539.313E | 539.244 | 539.218E | --- | --- | 26 |
| 27 | --- | --- | --- | 539.632E | 539.584E | 539.656 | 539.483E | 539.313E | 539.241E | 539.234 | --- | --- | 27 |
| 28 | --- | --- | --- | 539.628 | 539.581E | 539.656E | 539.477 | 539.313E | 539.237E | --- | --- | --- | 28 |
| 29 | --- | | --- | 539.628E | 539.580E | 539.656E | 539.482E | 539.313 | 539.234 | --- | --- | --- | 29 |
| 30 | --- | | --- | 539.628E | 539.586 | 539.656 | 539.467E | 539.310E | 539.232E | --- | --- | --- | 30 |
| 31 | --- | | --- | | 539.589E | | 539.492E | 539.308E | | --- | --- | --- | 31 |
| MEAN | --- | --- | --- | --- | 539.580 | 539.617 | 539.556 | 539.381 | 539.258 | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 539.648 | 539.675 | 539.651 | 539.487 | 539.303 | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 539.526 | 539.535 | 539.477 | 539.308 | 539.232 | --- | --- | --- | MIN |

WATER LEVELS IN METRES

### SUMMARY FOR THE YEAR 1988

MAXIMUM DAILY, 539.675 ON JUN 13

TYPE OF GAUGE - MANUAL
LOCATION - LAT 51 03 37 N
LONG 100 56 14 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1972

DRAINAGE AREA,
233 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## PLUM CREEK NEAR SOURIS - STATION NO. 05NE007

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0 B | 0.2208 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0 B | 0.3588 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0 B | 0.8788 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0 B | 0.8188 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0 B | 0.5208 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0 B | 0.2678 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0 B | 0.1588 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0 B | 0.1078 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0 B | 0.0708 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0 B | 0.0478 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0 B | 0.0288 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0 B | 0.3888 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0 B | 0.3908 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0 B | 0.1118 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0 B | 0.0388 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0 B | 0.0188 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0 B | 0.0888 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0 B | 0.1078 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0 B | 0.068 | 0.004 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0 B | 0.038 | 0.006 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0 B | 0.023 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0 B | 0.018 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0 B | 0.008 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0 B | 0.015 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0 B | 0.023 | 0.011 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0 B | 0.017 | 0.013 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0 B | 0.005 | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0 B | 0 | 0.004 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0.0208 | | 0 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0.020 | 4.323 | 0.068 | 0 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.001 | 0.144 | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0.020 | 0.676 | 0.013 | 0 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.018
MAXIMUM DAILY, 0.6788 ON APR 3
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
0.8928 AT 19:30 CST ON APR 3

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 37 30 N
LONG 100 18 30 W
DRAINAGE AREA, 5 380 km²

B - ICE CONDITIONS

REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 1.73 | SEP | 0 |
| APR | 374 | OCT | 0 |
| MAY | 4.84 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, 381 dam³

## PLUM LAKES ABOVE DELEAU DAM - STATION NO. 05NE801

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | 428.818 | 428.515 | 428.573 | 428.398 | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | --- | 428.726 | 428.513 | 428.587 | 428.341 | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | --- | 428.743 | 428.512 | 428.556 | 428.192 | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | --- | 428.781 | 428.515 | 428.548 | 428.146 | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | --- | 428.735 | 428.512 | 428.540 | 428.092 | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | --- | 428.718 | 428.508 | 428.531 | 428.048 | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | --- | 428.683 | 428.508 | 428.524 | 428.008 | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | --- | 428.641 | 428.512 | 428.518 | 428.323 | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | --- | 428.642 | 428.515 | 428.508 | 428.384 | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | --- | 428.648 | 428.518 | 428.494 | 428.268 | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | --- | 428.648 | 428.518 | 428.488 | 428.223 | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | --- | 428.632 | 428.521 | 428.500 | 428.188 | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | --- | 428.608 | 428.524 | 428.563 | 428.134 | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | --- | 428.588 | 428.521 | 428.543 | 428.078 | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | --- | 428.604 | 428.534 | 428.534 | 428.022 | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | --- | 428.602 | 428.548 | 428.521 | 427.984 | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | --- | 428.588 | 428.570 | 428.512 | 427.912 | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | --- | 428.578 | 428.579 | 428.506 | 427.881 | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | --- | 428.587 | 428.582 | 428.488 | 427.880 | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | --- | 428.588 | 428.585 | 428.483 | 427.842 | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | --- | 428.568 | 428.588 | 428.438 | 427.833A | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | --- | 428.560 | 428.588 | 428.421 | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | 428.307A | --- | 428.524 | 428.588 | 428.388 | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | --- | 428.540 | 428.585 | 428.368 | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | --- | 428.543 | 428.604 | 428.339 | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | --- | 428.537 | 428.604 | 428.314 | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | --- | 428.534 | 428.601 | 428.293 | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | --- | 428.524 | 428.588 | 428.288 | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | --- | 428.521 | 428.591 | 428.323 | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | 428.588A | 428.518 | 428.588 | 428.338 | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | 428.568 | | 428.578 | | --- | --- | | --- | | --- | 31 |
| MEAN | --- | --- | --- | 428.607 | 428.553 | 428.488 | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | 428.781 | 428.604 | 428.573 | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | 428.515 | 428.508 | 428.288 | --- | --- | --- | --- | --- | --- | MIN |

WATER LEVELS IN METRES

MAXIMUM DAILY, 428.781 ON APR 4

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 38 30 N
LONG 100 38 41 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

A - MANUAL GAUGE

REGULATED SINCE 1988

DRAINAGE AREA,
5 140 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## PLUM LAKES NEAR FINDLAY - STATION NO. 05NE805

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 428.448 | 428.382 | 428.284 | 428.140 | 428.035 | --- | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 428.448 | 428.354 | 428.284 | 428.132 | 428.018 | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | 428.441 | 428.354 | 428.249 | 428.128 | 428.038 | --- | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 428.480 | 428.345 | 428.234 | 428.135 | 428.052 | --- | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 428.437 | 428.340 | 428.238 | 428.124 | 428.011 | --- | --- | --- | 5 |
| 6 | --- | --- | --- | --- | 428.434 | 428.328 | 428.234 | 428.111 | 428.038 | --- | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 428.430 | 428.328 | 428.210 | 428.104 | 428.081 | --- | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 428.430 | 428.330 | 428.233 | 428.097 | 428.049 | --- | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 428.425 | 428.328 | 428.246 | 428.090 | 428.043 | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 428.412 | 428.311 | 428.233 | 428.080 | 428.005 | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 428.398 | 428.313 | 428.231 | 428.075 | 428.018 | --- | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 428.397 | 428.346 | 428.229 | 428.076 | 428.012A | --- | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 428.397 | 428.323 | 428.218 | 428.078 | --- | --- | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 428.398 | 428.327 | 428.213 | 428.081 | --- | --- | --- | --- | 14 |
| 15 | --- | --- | --- | --- | 428.390 | 428.320 | 428.210 | 428.073 | --- | --- | --- | --- | 15 |
| 16 | --- | --- | --- | --- | 428.384 | 428.308 | 428.202 | 428.082 | --- | --- | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 428.383 | 428.318 | 428.201 | 428.064 | 427.832A | --- | --- | --- | 17 |
| 18 | --- | --- | --- | 428.480A | 428.394 | 428.317 | 428.219 | 428.078 | --- | --- | --- | --- | 18 |
| 19 | --- | --- | --- | 428.478 | 428.398 | 428.300 | 428.218 | 428.078 | --- | --- | --- | --- | 19 |
| 20 | --- | --- | --- | 428.469 | 428.422 | 428.308 | 428.212 | 428.081 | --- | --- | --- | --- | 20 |
| 21 | --- | --- | --- | 428.483 | 428.391 | 428.293 | 428.198 | 428.088 | --- | --- | --- | --- | 21 |
| 22 | --- | --- | --- | 428.448 | 428.393 | 428.280 | 428.188 | 428.088 | --- | --- | --- | --- | 22 |
| 23 | --- | --- | --- | 428.481 | 428.371 | 428.288 | 428.180 | 428.068 | --- | --- | --- | --- | 23 |
| 24 | --- | --- | --- | 428.486 | 428.378 | 428.281 | 428.174 | 428.033 | 428.018A | --- | --- | --- | 24 |
| 25 | --- | --- | --- | 428.498 | 428.391 | 428.274 | 428.171 | 428.065 | --- | --- | --- | --- | 25 |
| 26 | --- | --- | --- | 428.484 | 428.381 | 428.297 | 428.198 | 428.087 | --- | --- | --- | --- | 26 |
| 27 | --- | --- | --- | 428.447 | 428.378 | 428.282 | 428.185 | 428.032 | --- | --- | --- | --- | 27 |
| 28 | --- | --- | --- | 428.481 | 428.388 | 428.248 | 428.184 | 428.063 | --- | --- | --- | --- | 28 |
| 29 | --- | | --- | 428.445 | 428.388 | 428.287 | 428.187 | 428.053 | --- | --- | --- | --- | 29 |
| 30 | --- | | --- | 428.448 | 428.393 | 428.282 | 428.183 | 428.020 | --- | --- | --- | --- | 30 |
| 31 | --- | | --- | | 428.381 | | 428.148 | 428.017 | | --- | | --- | 31 |
| MEAN | --- | --- | --- | --- | 428.402 | 428.310 | 428.205 | 428.078 | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 428.480 | 428.382 | 428.284 | 428.140 | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 428.381 | 428.248 | 428.148 | 428.017 | --- | --- | --- | --- | MIN |

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 37 48 N
LONG 100 43 08 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

A - MANUAL GAUGE

REGULATED SINCE 1968

DRAINAGE AREA,
6 140 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## POPLAR RIVER AT OUTLET OF WEAVER LAKE - STATION NO. 05RE001

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.23A | 2.90A | 3.19A | 3.17 | 4.38 | 9.42 | 33.3 | 19.5 | 15.2 | 15.8 | 28.7A | 23.0E | 1 |
| 2 | 3.26A | 2.87A | 3.19A | 3.15 | 4.48 | 9.44 | 32.4 | 19.4 | 15.4 | 14.8 | 28.0A | 22.8A | 2 |
| 3 | 3.28 | 2.85A | 3.17A | 3.14 | 4.46 | 9.89 | 32.1 | 20.0 | 15.7 | 14.5 | 28.4A | 22.2A | 3 |
| 4 | 3.32 | 2.88 | 3.17 | 3.15 | 4.02 | 10.7 | 32.6 | 21.5 | 16.1 | 14.8 | 28.5 | 22.0 | 4 |
| 5 | 3.33 | 2.82 | 3.16 | 3.16 | 4.33 | 11.3 | 32.7 | 22.5 | 16.4 | 13.9 | 28.6 | 21.4A | 5 |
| 6 | 3.26 | 2.88 | 3.17 | 3.16 | 4.78 | 12.6 | 30.8 | 22.6 | 16.8 | 14.1 | 28.6 | 21.1E | 6 |
| 7 | 3.15 | 2.92 | 3.22 | 3.16 | 5.00 | 13.2 | 31.0 | 23.2 | 16.8 | 15.2 | 28.9 | 20.8E | 7 |
| 8 | 3.18A | 2.91 | 3.26 | 3.14 | 4.88 | 13.2 | 30.9 | 23.6 | 16.6 | 15.1 | 26.9 | 20.6E | 8 |
| 9 | 3.19A | 2.97 | 3.27 | 3.14 | 4.78 | 13.6 | 28.7 | 24.4 | 16.7 | 15.0 | 26.8 | 20.2E | 9 |
| 10 | 3.11A | 2.84 | 3.29 | 3.14 | 5.07 | 14.4 | 29.6 | 24.4 | 16.8 | 15.3 | 29.1 | 19.9E | 10 |
| 11 | 3.18 | 3.00 | 3.14 | 3.10 | 5.32 | 15.5 | 29.[illegible] | 24.4 | 17.0 | 14.3 | 28.3 | 19.8E | 11 |
| 12 | 3.17 | 3.03 | 3.13 | 3.11 | 5.09 | 17.4 | 28.6 | 24.4 | 16.4 | 14.4 | 28.4 | 19.3E | 12 |
| 13 | 3.24 | 2.98 | 3.16 | 3.07 | 4.82 | 17.2 | 27.6 | 24.7 | 16.5 | 15.7 | 28.6 | 19.0E | 13 |
| 14 | 3.20 | 2.98A | 3.16 | 3.04 | 4.82 | 17.2 | 26.8 | 23.0 | 16.8 | 15.6 | 28.2 | 18.7E | 14 |
| 15 | 3.17 | 2.98A | 3.14A | 3.07 | 4.84 | 18.3 | 26.7 | 22.2 | 16.6 | 15.6 | 28.1A | 18.5E | 15 |
| 16 | 3.17 | 2.98A | 3.13 | 3.12 | 5.03 | 19.0 | 28.3 | 22.2 | 16.7 | 15.6 | 28.9A | 18.2E | 16 |
| 17 | 3.14 | 2.98A | 3.12 | 3.16 | 5.02 | 18.5 | 28.3 | 21.9 | 16.6 | 15.6 | 28.9A | 17.9E | 17 |
| 18 | 3.15 | 3.02 | 3.13 | 3.16 | 4.78 | 18.7 | 28.6 | 21.5 | 16.3 | 15.3 | 29.3E | 17.7E | 18 |
| 19 | 3.14 | 3.00 | 3.14 | 3.16 | 5.28 | 21.1 | 28.3 | 21.2 | 16.4 | 15.3 | 27.9A | 17.4E | 19 |
| 20 | 3.12 | 3.03 | 3.12 | 3.13 | 5.32 | 22.6 | 26.7 | 20.4 | 16.9 | 15.6 | 27.3A | 17.2E | 20 |
| 21 | 3.18 | 3.00A | 3.08 | 3.18 | 5.47 | 23.3 | 24.6 | 19.6 | 15.5 | 15.9 | 26.8A | 16.9E | 21 |
| 22 | 3.15 | 3.02A | 3.04 | 3.35 | 5.06 | 24.2 | 23.8 | 19.4 | 14.8 | 15.6 | 26.2E | 16.7E | 22 |
| 23 | 3.07 | 3.06 | 3.03 | 3.66 | 5.04 | 25.2 | 23.1 | 20.0 | 15.7 | 15.7 | 25.6E | 16.4E | 23 |
| 24 | 3.08 | 3.10 | 3.00 | 3.86 | 6.04 | 25.7 | 23.1 | 19.4 | 15.1 | 15.8 | 25.1E | 16.2E | 24 |
| 25 | 3.07 | 3.10 | 3.02 | 3.76 | 6.28 | 27.3 | 22.3 | 18.9 | 15.2 | 15.6 | 24.7E | 15.9E | 25 |
| 26 | 3.06 | 3.14 | 3.03 | 3.68 | 6.38 | 28.5 | 21.0 | 17.8 | 15.8 | 15.9 | 24.3E | 15.7E | 26 |
| 27 | 3.11 | 3.15 | 3.03 | 3.66 | 6.61 | 30.4 | 21.3 | 17.5 | 15.4 | 17.4A | 23.8A | 15.4E | 27 |
| 28 | 3.03 | 3.18A | 3.01 | 4.08 | 7.18 | 31.4 | 20.8 | 18.1 | 14.0 | 18.9 | 23.8E | 15.2E | 28 |
| 29 | 3.08 | | 3.04 | 4.18 | 7.78 | 31.8 | 20.6 | 17.4 | 15.2 | 22.3 | 23.7A | 15.0E | 29 |
| 30 | 3.07 | | 3.14 | 4.28 | 8.28 | 32.8 | 20.0 | 17.0 | 15.1 | 24.3 | 23.3A | 14.8E | 30 |
| 31 | 3.00 | | 3.18 | | 8.88 | | 19.8 | 16.8 | | 26.8 | | 14.6A | 31 |
| TOTAL | 97.61 | 83.70 | 98.83 | 100.81 | 170.81 | 588.88 | 833.7 | 650.1 | 482.8 | 508.0 | 819.3 | 570.0 | TOTAL |
| MEAN | 3.15 | 2.99 | 3.13 | 3.25 | 5.51 | 19.6 | 26.8 | 21.0 | 16.1 | 16.3 | 27.3 | 18.4 | MEAN |
| MAX | 3.32 | 3.15 | 3.29 | 4.28 | 8.88 | 32.8 | 33.3 | 24.7 | 17.0 | 26.8 | 29.4 | 23.0 | MAX |
| MIN | 2.90 | 2.85 | 3.00 | 3.04 | 4.02 | 9.42 | 19.8 | 16.8 | 14.0 | 13.9 | 23.3 | 14.6 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 13.7
MAXIMUM DAILY, 33.3 ON JUL 1
MINIMUM DAILY, 2.85A ON FEB 3
MAXIMUM INSTANTANEOUS,
34.0 AT 18:30 CST ON JUL 2

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 52 42 40 N
LONG 99 48 10 W
DRAINAGE AREA, 6 850 km²
A - MANUAL GAUGE

E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 8 420 | JUL | 71 200 |
| FEB | 7 230 | AUG | 56 200 |
| MAR | 8 370 | SEP | 41 700 |
| APR | 8 680 | OCT | 43 700 |
| MAY | 14 800 | NOV | 70 800 |
| JUN | 50 700 | DEC | 49 200 |

TOTAL DISCHARGE, 431 000 dam³

## PORTAGE DIVERSION NEAR PORTAGE LA PRAIRIE - STATION NO. 05LL019

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | 0B | 0 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | 0B | 11.8 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | 0B | 42.6 B | 0 | 0 | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | 0B | 36.8 | 0 | 0 | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | 0B | 27.8 | 0 | 0 | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.784 | 0 | 0 | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | 0B | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | 0B | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | 0B | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | 0B | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | 0B | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | 0B | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | 0B | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | 0B | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | 0B | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | --- | --- | | --- | --- | --- | 31 |
| TOTAL | --- | --- | 0 | 113.984 | 0 | 0 | --- | --- | --- | --- | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 3.80 | 0 | 0 | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | 0 | 42.6 | 0 | 0 | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.934
MAXIMUM DAILY, 42.6B ON APR 18
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
87.4B AT 17:32 CST ON APR 18

SUMMARY FOR THE MONTHS MAR TO JUN

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 58 00 N
LONG 98 22 50 W

B - ICE CONDITIONS

REGULATED SINCE 1970

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | --- |
| FEB | --- | AUG | --- |
| MAR | 0 | SEP | --- |
| APR | B 850 | OCT | --- |
| MAY | 0 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, B 850 dam³

## PORTAGE RESERVOIR NEAR PORTAGE LA PRAIRIE - STATION NO. 05MJ005

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 280.630 | 280.804 | 280.809 | 280.673 | 284.078 | 284.584 | 284.648 | 284.607 | 284.530 | 283.478 | 280.838A | 280.742 | 1 |
| 2 | 280.607 | 280.859 | 280.878 | 280.926 | 284.158 | 284.643 | 284.643 | 284.530 | 284.533 | 283.317A | 280.218A | 280.741 | 2 |
| 3 | 280.628 | 280.823 | 280.897 | 280.920 | 284.257 | 284.631 | 284.629 | 284.522 | 284.543 | 282.621E | 280.411A | 280.767 | 3 |
| 4 | 280.615 | 280.885 | 280.884 | 281.013 | 284.368 | 284.634 | 284.622 | 284.518 | 284.538 | 282.680A | 280.888A | 280.823 | 4 |
| 5 | 280.884 | 280.880 | 280.874 | 281.538 | 284.367 | 284.634 | 284.611 | 284.487 | 284.533 | 282.283A | 280.721A | 280.843 | 5 |
| 6 | 280.789 | 280.704 | 280.811 | 281.886 | 284.387 | 284.631 | 284.601 | 284.481 | 284.547 | 281.881A | 280.838A | 280.832 | 6 |
| 7 | 280.847 | 280.898 | 280.988 | 281.906A | 284.358 | 284.640 | 284.591 | 284.488 | 284.561 | 281.784A | 281.020A | 280.806 | 7 |
| 8 | 280.853 | 280.958 | 280.850 | 282.640E | 284.372 | 284.585 | 284.582 | 284.484 | 284.559 | 281.808A | 281.004A | 280.783 | 8 |
| 9 | 280.780 | 280.807 | 280.908 | 282.708A | 284.442 | 284.580 | 284.576 | 284.487 | 284.587 | 281.653A | 280.837A | 280.884 | 9 |
| 10 | 280.789 | 280.875 | 280.893 | 282.840E | 284.478 | 284.583 | 284.579 | 284.489 | 284.586 | 281.800A | 280.848A | 280.733 | 10 |
| 11 | 280.773 | 280.800 | 280.822 | 282.238A | 284.517 | 284.585 | 284.582 | 284.488 | 284.573 | 281.704A | 280.654A | 280.826 | 11 |
| 12 | 280.743 | 280.888 | 280.874 | 282.181 | 284.514 | 284.583 | 284.573 | 284.488 | 284.587 | 281.401A | 280.654A | 280.787 | 12 |
| 13 | 280.688 | 280.805 | 280.817 | 282.161 | 284.500 | 284.608 | 284.572 | 284.480 | 284.592 | 281.188A | 280.820A | 280.818 | 13 |
| 14 | 280.683 | 280.827 | 280.867 | 282.190 | 284.502 | 284.583 | 284.585 | 284.478 | 284.590 | 281.186 | 280.818A | 280.788 | 14 |
| 15 | 280.843 | 280.811 | 280.841 | 282.218 | 284.508 | 284.848 | 284.588 | 284.480 | 284.598 | 281.177 | 280.697A | 280.721 | 15 |
| 16 | 280.735 | 280.804 | 280.841 | 282.351 | 284.507 | 284.828 | 284.550 | 284.483 | 284.591 | 281.184 | 280.642A | 280.808 | 16 |
| 17 | 280.788 | 280.768 | 280.876 | 282.327 | 284.508 | 284.606 | 284.544 | 284.488 | 284.587 | 281.204 | 280.698A | 280.801 | 17 |
| 18 | 280.859 | 280.780 | 280.882 | 282.331 | 284.541A | 284.592 | 284.536 | 284.516 | 284.587 | 281.208 | 280.609A | 280.808 | 18 |
| 19 | 280.784 | 280.857 | 280.870 | 282.386 | 284.558 | 284.579 | 284.507 | 284.528 | 284.558 | 281.208 | 280.578A | 280.804 | 19 |
| 20 | 280.845 | 280.800 | 280.838 | 281.787A | 284.548 | 284.588 | 284.498 | 284.528 | 284.547 | 281.207 | 280.814A | 280.784 | 20 |
| 21 | 280.885 | 280.887 | 280.850 | 282.108A | 284.531 | 284.558 | 284.505 | 284.532 | 284.543 | 281.202 | 280.687A | 280.782 | 21 |
| 22 | 280.788 | 280.808 | 280.809 | 282.784 | 284.531 | 284.551 | 284.511 | 284.518 | 284.508 | 281.202 | 280.858 | 280.835 | 22 |
| 23 | 280.783 | 280.838 | 280.856 | 283.020 | 284.533 | 284.548 | 284.504 | 284.528 | 284.458 | 281.200 | 280.873 | 280.848 | 23 |
| 24 | 280.858 | 280.820 | 280.817 | 283.285 | 284.532 | 284.548 | 284.501 | 284.541 | 284.422 | 281.198 | 280.880 | 280.713 | 24 |
| 25 | 280.850 | 280.818 | 280.856 | 283.820 | 284.531 | 284.558 | 284.498 | 284.546 | 284.398 | 281.202 | 280.848 | 280.898 | 25 |
| 26 | 280.788 | 280.858 | 280.773 | 283.824 | 284.553 | 284.587 | 284.486 | 284.548 | 284.305 | 281.186 | 280.873 | 280.758 | 26 |
| 27 | 280.783 | 280.898 | 280.788 | 283.837 | 284.578 | 284.598 | 284.480 | 284.536 | 284.148 | 281.187 | 280.884 | 280.726 | 27 |
| 28 | 280.784 | 280.868 | 280.881 | 284.018 | 284.588 | 284.613 | 284.478 | 284.538 | 284.002 | 281.186 | 280.893 | 280.840 | 28 |
| 29 | 280.818 | | 280.778 | 284.078 | 284.598 | 284.630 | 284.478 | 284.520 | 283.858 | 281.186 | 280.780 | 280.784 | 29 |
| 30 | 280.784 | | 280.821 | 284.083 | 284.670 | 284.843 | 284.483 | 284.523 | 283.888 | 281.183 | 280.788 | 280.808 | 30 |
| 31 | 280.808 | | 280.884 | | 284.688 | | 284.493 | 284.524 | | 281.208 | | 280.788 | 31 |
| MEAN | 280.810 | 280.858 | 280.887 | 282.483 | 284.488 | 284.678 | 284.548 | 284.508 | 284.453 | 281.900 | 280.734 | 280.788 | MEAN |
| MAX | 280.843 | 280.888 | 280.897 | 284.083 | 284.678 | 284.848 | 284.648 | 284.548 | 284.598 | 283.478 | 281.020 | 280.833 | MAX |
| MIN | 280.688 | 280.704 | 280.788 | 280.673 | 284.078 | 284.531 | 284.478 | 284.478 | 283.888 | 281.186 | 280.218 | 280.808 | MIN |

WATER LEVELS IN METRES

MEAN, 283.883
MAXIMUM DAILY, 284.848 ON JUL 1
MINIMUM DAILY, 280.218A ON NOV 2
MAXIMUM INSTANTANEOUS,
284.852 AT 10:17 CST ON JUL 1

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 55 43 N
LONG 98 20 12 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED SINCE 1970

DRAINAGE AREA,
102 000 km²

WATER LEVELS ARE REFERRED TO PORTAGE DIVERSION DATUM
APPLY .000 m ADJUSTMENT TO CONVERT TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1929 ADJ.)

## RAT LAKE NEAR NOTISI CONTROL STRUCTURE - STATION NO. 06TF004

DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | 27.823 | 27.288 | 27.052 | 27.201 | 28.182 | 28.573 | 28.526 | 28.389 | 28.554 | 28.417 | 27.848 | 1 |
| 2 | --- | 27.813 | 27.278 | 27.044 | 27.235 | 28.201 | 28.564 | 28.526 | 28.388 | 28.559 | 28.397 | 27.831 | 2 |
| 3 | --- | 27.808 | 27.273 | 27.040 | 27.273 | 28.223 | 28.556 | 28.520 | 28.386 | 28.558 | 28.378 | 27.814 | 3 |
| 4 | --- | 27.804 | 27.268 | 27.034 | 27.317 | 28.238 | 28.552 | 28.526 | 28.377 | 28.548 | 28.373 | 27.808 | 4 |
| 5 | --- | 27.488 | 27.264 | 27.027 | 27.348 | 28.253 | 28.508 | 28.528 | 28.378 | 28.543 | 28.381 | 27.883 | 5 |
| 6 | --- | 27.480 | 27.248 | 27.017 | 27.387 | 28.271 | 28.512 | 28.518 | 28.382 | 28.548 | 28.343 | 27.858 | 6 |
| 7 | --- | 27.470 | 27.248 | 27.018 | 27.426 | 28.283 | 28.518 | 28.513 | 28.398 | 28.548 | 28.328 | 27.838 | 7 |
| 8 | --- | 27.468 | 27.240 | 27.024 | 27.456 | 28.293 | 28.523 | 28.508 | 28.411 | 28.547 | 28.327 | 27.823 | 8 |
| 9 | --- | 27.455 | 27.232 | 27.030 | 27.481 | 28.307 | 28.538 | 28.486 | 28.427 | 28.548 | 28.321 | 27.808 | 9 |
| 10 | --- | 27.451 | 27.237 | 27.038 | 27.538 | 28.328 | 28.547 | 28.487 | 28.441 | 28.545 | 28.308 | 27.787 | 10 |
| 11 | --- | 27.443 | 27.217 | 27.041 | 27.585 | 28.354 | 28.553 | 28.483 | 28.451 | 28.550 | 28.303 | 27.766 | 11 |
| 12 | --- | 27.440 | 27.208 | 27.048 | 27.622 | 28.374 | 28.560 | 28.478 | 28.439 | 28.549 | 28.294 | 27.749 | 12 |
| 13 | --- | 27.428 | 27.198 | 27.064 | 27.684 | 28.385 | 28.557 | 28.470 | 28.438 | 28.554 | 28.274 | 27.733 | 13 |
| 14 | --- | 27.418 | 27.188 | 27.083 | 27.682 | 28.398 | 28.548 | 28.488 | 28.437 | 28.558 | 28.264 | 27.717 | 14 |
| 15 | --- | 27.408 | 27.177 | 27.058 | 27.715 | 28.407 | 28.542 | 28.482 | 28.440 | 28.556 | 28.232 | 27.701 | 15 |
| 16 | --- | 27.398 | 27.169 | 27.058 | 27.740 | 28.412 | 28.531 | 28.444 | 28.443 | 28.557 | 28.208 | 27.688 | 16 |
| 17 | --- | 27.388 | 27.161 | 27.080 | 27.770 | 28.430 | 28.534 | 28.431 | 28.482 | 28.554 | 28.187 | 27.668 | 17 |
| 18 | --- | 27.378 | 27.153 | 27.080 | 27.784 | 28.442 | 28.518 | 28.432 | 28.474 | 28.519 | 28.164 | 27.651 | 18 |
| 19 | --- | 27.372 | 27.148 | 27.089 | 27.827 | 28.451 | 28.521 | 28.436 | 28.480 | 28.482 | 28.152 | 27.636 | 19 |
| 20 | --- | 27.368 | 27.137 | 27.081 | 27.884 | 28.460 | 28.508 | 28.421 | 28.488 | 28.472 | 28.134 | 27.630 | 20 |
| 21 | --- | 27.354 | 27.127 | 27.071 | 27.821 | 28.480 | 28.503 | 28.401 | 28.488A | 28.488 | 28.118 | 27.614 | 21 |
| 22 | --- | 27.348 | 27.121 | 27.084 | 27.868 | 28.482 | 28.507 | 28.394 | 28.508E | 28.480 | 28.100 | 27.580 | 22 |
| 23 | --- | 27.343 | 27.112 | 27.118 | 27.888 | 28.488 | 28.578 | 28.387 | 28.508E | 28.435 | 28.073 | 27.577 | 23 |
| 24 | --- | 27.338 | 27.108 | 27.128 | 28.015 | 28.478 | 28.582 | 28.384 | 28.508E | 28.423 | 28.058 | 27.564 | 24 |
| 25 | --- | 27.327 | 27.098 | 27.128 | 28.068 | 28.490 | 28.586 | 28.400 | 28.508E | 28.418 | 28.037 | 27.548 | 25 |
| 26 | 27.588A | 27.314 | 27.092 | 27.133 | 28.081 | 28.518 | 28.568 | 28.413 | 28.507A | 28.408 | 28.022 | 27.531 | 26 |
| 27 | 27.581 | 27.312 | 27.088 | 27.140 | 28.108 | 28.533 | 28.567 | 28.407 | 28.510 | 28.415 | 27.998 | 27.517 | 27 |
| 28 | 27.588 | 27.288 | 27.077 | 27.148 | 28.132 | 28.541 | 28.556 | 28.397 | 28.510 | 28.430 | 27.978 | 27.501 | 28 |
| 29 | 27.587 | | 27.071 | 27.161 | 28.148 | 28.551 | 28.547 | 28.398 | 28.517 | 28.453 | 27.972 | 27.485 | 29 |
| 30 | 27.583 | | 27.084 | 27.178 | 28.160 | 28.563 | 28.538 | 28.384 | 28.531 | 28.441 | 27.957 | 27.478 | 30 |
| 31 | 27.838 | | 27.088 | | 28.188 | | 28.527 | 28.388 | | 28.432 | | 27.448 | 31 |
| MEAN | --- | 27.411 | 27.171 | 27.072 | 27.732 | 28.381 | 28.552 | 28.481 | 28.452 | 28.504 | 28.202 | 27.693 | MEAN |
| MAX | --- | 27.823 | 27.288 | 27.178 | 28.188 | 28.563 | 28.660 | 28.526 | 28.531 | 28.559 | 28.417 | 27.848 | MAX |
| MIN | --- | 27.288 | 27.088 | 27.017 | 27.201 | 28.182 | 28.527 | 28.388 | 28.386 | 28.405 | 27.957 | 27.448 | MIN |

WATER LEVELS IN METRES

MAXIMUM DAILY, 28.660 ON JUL 12
MINIMUM DAILY, 27.017 ON APR 6
MAXIMUM INSTANTANEOUS,
28.680 AT 13:25 CST ON JUL 12

WATER LEVELS ARE REFERRED TO ASSUMED DATUM

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 56 07 57 N
LONG 98 28 08 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED

## RAT RIVER NEAR OTTERBURNE - STATION NO. 05OE001

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0B | 0B | 0B | 0 B | 2.32 | 1.15 | 1.28 | 0.081 | 0.089 | 0.005 | 0.0048 | 0.0058 | 1 |
| 2 | 0B | 0B | 0B | 0 B | 2.21 | 1.14 | 1.21 | 0.026 | 0.089 | 0.002 | 0.0048 | 0.0058 | 2 |
| 3 | 0B | 0B | 0B | 0 B | 2.13 | 1.08 | 1.21 | 0.002 | 0.071 | 0.001 | 0.0058 | 0.0058 | 3 |
| 4 | 0B | 0B | 0B | 0 B | 2.06 | 1.06 | 1.13 | 0.001 | 0.063 | 0.001 | 0.0058 | 0.0058 | 4 |
| 5 | 0B | 0B | 0B | 0 B | 2.06 | 1.04 | 1.01 | 0.001 | 0.030 | 0.002 | 0.0058 | 0.0048 | 5 |
| 6 | 0B | 0B | 0B | 0.0828 | 2.03 | 1.04 | 0.958 | 0.001 | 0.018 | 0.002 | 0.0058 | 0.0038 | 6 |
| 7 | 0B | 0B | 0B | 0.1888 | 1.93 | 1.08 | 0.834 | 0.001 | 0.018 | 0.002 | 0.0078 | 0.0028 | 7 |
| 8 | 0B | 0B | 0B | 0.1138 | 1.83 | 1.12 | 0.933 | 0.001 | 0.018 | 0.002 | 0.0088 | 0.0028 | 8 |
| 9 | 0B | 0B | 0B | 0.0888 | 1.78 | 1.04 | 0.885 | 0.001 | 0.008 | 0.002 | 0.0088 | 0.0038 | 9 |
| 10 | 0B | 0B | 0B | 0.0818 | 1.83 | 1.06 | 1.01 | 0.001 | 0.004 | 0.002 | 0.0088 | 0.0028 | 10 |
| 11 | 0B | 0B | 0B | 0.1008 | 1.48 | 0.985 | 0.974 | 0.001 | 0.014 | 0.002 | 0.0088 | 0.0018 | 11 |
| 12 | 0B | 0B | 0B | 0.2158 | 1.42 | 0.886 | 1.02 | 0.007 | 0.018 | 0.002 | 0.0078 | 0.0018 | 12 |
| 13 | 0B | 0B | 0B | 0.3378 | 1.38 | 0.887 | 1.06 | 0.011 | 0.018 | 0.002 | 0.0078 | 0.0018 | 13 |
| 14 | 0B | 0B | 0B | 0.4788 | 1.29 | 1.11 | 1.08 | 0.013 | 0.021 | 0.002 | 0.0078 | 0.0018 | 14 |
| 15 | 0B | 0B | 0B | 1.00 B | 1.19 | 1.37 | 0.990 | 0.013 | 0.026 | 0.002 | 0.0078 | 0.0018 | 15 |
| 16 | 0B | 0B | 0B | 5.30 B | 1.08 | 1.37 | 0.830 | 0.011 | 0.026 | 0.002 | 0.0078 | 0.0018 | 16 |
| 17 | 0B | 0B | 0B | 7.00 B | 1.06 | 1.16 | 0.885 | 0.005 | 0.026 | 0.001 | 0.0078 | 0.0018 | 17 |
| 18 | 0B | 0B | 0B | 5.95 B | 1.08 | 1.04 | 0.648 | 0.012 | 0.021 | 0.001 | 0.0068 | 0.0018 | 18 |
| 19 | 0B | 0B | 0B | 4.90 B | 1.16 | 0.940 | 0.451 | 0.027 | 0.020 | 0.001 | 0.0068 | 0.0018 | 19 |
| 20 | 0B | 0B | 0B | 5.83 B | 1.26 | 0.947 | 0.374 | 0.026 | 0.022 | 0.001 | 0.0068 | 0.0018 | 20 |
| 21 | 0B | 0B | 0B | 5.83 B | 1.38 | 1.02 | 0.331 | 0.024 | 0.023 | 0.001 | 0.0068 | 0 B | 21 |
| 22 | 0B | 0B | 0B | 5.75 | 1.26 | 1.00 | 0.288 | 0.026 | 0.021 | 0.001 | 0.0068 | 0 B | 22 |
| 23 | 0B | 0B | 0B | 5.87 | 1.13 | 1.05 | 0.270 | 0.024 | 0.021 | 0.001 | 0.0068 | 0 B | 23 |
| 24 | 0B | 0B | 0B | 6.66 | 1.02 | 1.24 | 0.251 | 0.208 | 0.020 | 0.001 | 0.0068 | 0 B | 24 |
| 25 | 0B | 0B | 0B | 3.67 | 0.983 | 1.41 | 0.203 | 0.187 | 0.018 | 0.004 | 0.0068 | 0 B | 25 |
| 26 | 0B | 0B | 0B | 2.95 | 1.04 | 1.40 | 0.171 | 0.118 | 0.013 | 0.004 | 0.0068 | 0 B | 26 |
| 27 | 0B | 0B | 0B | 2.41 | 1.22 | 1.30 | 0.186 | 0.071 | 0.011 | 0.002 | 0.0068 | 0 B | 27 |
| 28 | 0B | 0B | 0B | 2.10 | 1.32 | 1.18 | 0.148 | 0.048 | 0.010 | 0.002 | 0.0058 | 0 B | 28 |
| 29 | 0B | | 0B | 2.43 | 1.30 | 1.28 | 0.138 | 0.038 | 0.007 | 0.002 | 0.0058 | 0 B | 29 |
| 30 | 0B | | 0B | 2.48 | 1.20 | 1.38 | 0.116 | 0.026 | 0.006 | 0.002 | 0.0058 | 0 B | 30 |
| 31 | 0B | | 0B | | 1.14 | | 0.082 | 0.042 | | 0.003 | | 0 B | 31 |
| TOTAL | 0 | 0 | 0 | 88.358 | 45.303 | 33.705 | 20.771 | 1.057 | 0.706 | 0.082 | 0.187 | 0.046 | TOTAL |
| MEAN | 0 | 0 | 0 | 2.31 | 1.46 | 1.13 | 0.670 | 0.034 | 0.024 | 0.002 | 0.008 | 0.001 | MEAN |
| MAX | 0 | 0 | 0 | 7.00 | 2.32 | 1.41 | 1.28 | 0.208 | 0.071 | 0.005 | 0.008 | 0.005 | MAX |
| MIN | 0 | 0 | 0 | 0 | 0.983 | 0.886 | 0.082 | 0.001 | 0.004 | 0.001 | 0.004 | 0 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.489
MAXIMUM DAILY, 7.00B ON APR 17
MINIMUM DAILY, 0B ON JAN 1
MAXIMUM INSTANTANEOUS,
7.87 AT 10:33 CST ON APR 16

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 37 43 N
LONG 97 00 38 W
DRAINAGE AREA, 1 340 km²

B - ICE CONDITIONS

REGULATED SINCE 1988

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 0 | JUL 1 780 | |
| FEB | 0 | AUG 81.3 | |
| MAR | 0 | SEP 61.2 | |
| APR 5 980 | | OCT 8.38 | |
| MAY 3 810 | | NOV 16.2 | |
| JUN 2 810 | | DEC 3.69 | |

TOTAL DISCHARGE, 14 800 dam³

## RAT RIVER NEAR ST. MALO - STATION NO. 05DE002

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0S | 0 E | 1.88 | 1.13 | 1.31 | 0.084 | 0.008 | 0.008 | --- | --- | 1 |
| 2 | --- | --- | 0S | 0 E | 1.70 | 1.13 | 1.24 | 0.038 | 0.004 | 0.003 | --- | --- | 2 |
| 3 | --- | --- | 0S | 0 E | 1.68 | 1.12 | 1.13 | 0.118 | 0.001 | 0.001 | --- | --- | 3 |
| 4 | --- | --- | 0S | 0 E | 1.78 | 1.07 | 1.08 | 0.081 | 0.038 | 0.001 | --- | --- | 4 |
| 5 | --- | --- | 0S | 0 E | 1.78 | 1.08 | 1.04 | 0.027 | 0.008 | 0.001 | --- | --- | 5 |
| 6 | --- | --- | 0S | 0 E | 1.88 | 1.08 | 1.02 | 0.017 | 0.051 | 0.002 | --- | --- | 6 |
| 7 | --- | --- | 0S | 0 E | 1.80 | 1.08 | 1.03 | 0.022 | 0.038 | 0.002 | --- | --- | 7 |
| 8 | --- | --- | 0S | 0 E | 1.84 | 1.04 | 1.07 | 0.024 | 0.025 | 0.001 | --- | --- | 8 |
| 9 | --- | --- | 0S | 0 E | 1.38 | 0.978 | 1.08 | 0.020 | 0.018 | 0.001 | --- | --- | 9 |
| 10 | --- | --- | 0S | 0 E | 1.28 | 0.813 | 1.07 | 0.017 | 0.018 | 0.001 | --- | --- | 10 |
| 11 | --- | --- | 0S | 0 E | 1.18 | 0.738 | 1.08 | 0.011 | 0.045 | 0.001 | --- | --- | 11 |
| 12 | --- | --- | 0S | 0 E | 1.07 | 0.783 | 1.13 | 0.015 | 0.048 | 0.001 | --- | --- | 12 |
| 13 | --- | --- | 0S | 0.0018 | 0.850 | 1.22 | 1.01 | 0.028 | 0.028 | 0.001 | --- | --- | 13 |
| 14 | --- | --- | 0S | 0.0028 | 0.841 | 1.48 | 0.787 | 0.015 | 0.018 | 0.001 | --- | --- | 14 |
| 15 | --- | --- | 0S | 0.0038 | 0.778 | 1.40 | 0.808 | 0.008 | 0.018 | 0.002 | --- | --- | 15 |
| 16 | --- | --- | 0S | 0.0028 | 0.780 | 1.17 | 0.801 | 0.003 | 0.028 | 0.002 | --- | --- | 16 |
| 17 | --- | --- | 0S | 0.0028 | 0.772 | 1.02 | 0.418 | 0.004 | 0.028 | 0.001 | --- | --- | 17 |
| 18 | --- | --- | 0S | 0.0028 | 0.802 | 1.08 | 0.357 | 0.024 | 0.081 | 0.001 | --- | --- | 18 |
| 19 | --- | --- | 0S | 0.0258 | 0.818 | 1.17 | 0.308 | 0.084 | 0.022 | 0.001 | --- | --- | 19 |
| 20 | --- | --- | 0S | 0.4338 | 0.928 | 1.20 | 0.288 | 0.071 | 0.013 | 0.001 | --- | --- | 20 |
| 21 | --- | --- | 0S | 0.8048 | 0.888 | 1.18 | 0.235 | 0.178 | 0.013 | 0.001 | --- | --- | 21 |
| 22 | --- | --- | 0S | 0.888 | 0.788 | 1.28 | 0.270 | 0.183 | 0.010 | 0.001 | --- | --- | 22 |
| 23 | --- | --- | 0S | 0.827 | 0.714 | 1.44 | 0.247 | 0.188 | 0.009 | 0.001 | --- | --- | 23 |
| 24 | --- | --- | 0S | 0.878 | 0.740 | 1.44 | 0.208 | 0.114 | 0.012 | 0.001 | --- | --- | 24 |
| 25 | --- | --- | 0S | 0.888 | 0.874 | 1.48 | 0.183 | 0.087 | 0.011 | 0.001 | --- | --- | 25 |
| 26 | --- | --- | 0S | 0.873 | 1.08 | 1.31 | 0.148 | 0.080 | 0.008 | 0.001 | --- | --- | 26 |
| 27 | --- | --- | 0S | 0.778 | 1.18 | 1.23 | 0.112 | 0.074 | 0.008 | 0.002 | --- | --- | 27 |
| 28 | --- | --- | 0S | 1.58 | 1.10 | 1.23 | 0.108 | 0.080 | 0.008 | 0.004 | --- | --- | 28 |
| 29 | --- | | 0S | 1.77 | 1.03 | 1.33 | 0.090 | 0.080 | 0.008 | 0.003 | --- | --- | 29 |
| 30 | --- | | 0S | 1.88 | 1.02 | 1.27 | 0.082 | 0.103 | 0.008 | 0.002A | --- | --- | 30 |
| 31 | --- | | 0S | | 1.10 | | 0.080 | 0.103 | | 0.002E | | --- | 31 |
| TOTAL | --- | --- | 0 | 11.081 | 38.610 | 34.850 | 19.338 | 1.898 | 0.904 | 0.049 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.388 | 1.18 | 1.18 | 0.824 | 0.081 | 0.030 | 0.002 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 1.77 | 1.78 | 1.48 | 1.31 | 0.183 | 0.088 | 0.008 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0.714 | 0.738 | 0.080 | 0.003 | 0.008 | 0.001 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.423
MAXIMUM DAILY, 1.78 ON MAY 4
MINIMUM DAILY, 0S ON MAR 1
MAXIMUM INSTANTANEOUS,
1.92 AT 10:00 CST ON APR 28

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 10 04 N
LONG 94 36 35 W
DRAINAGE AREA, 854 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
REGULATED SINCE 1959

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 1 870 |
| FEB | --- | AUG | 184 |
| MAR | 0 | SEP | 78.1 |
| APR | 838 | OCT | 4.33 |
| MAY | 3 070 | NOV | --- |
| JUN | 3 010 | DEC | --- |

TOTAL DISCHARGE, 8 980 dam³

## RAT RIVER NEAR SUNDOWN - STATION NO. 05DE004

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.0488 | 0.0628 | 0.0308 | 0.1988 | 1.73 | 1.26 | 2.85 | 0.048 | 0.084 | 0.071 | 0.135 | 0.0938 | 1 |
| 2 | 0.0488 | 0.0648 | 0.0318 | 0.2298 | 1.84 | 1.26 | 2.62 | 0.042 | 0.076 | 0.072 | 0.130 | 0.0908 | 2 |
| 3 | 0.0508 | 0.0648 | 0.0318 | 0.2788 | 1.33 | 1.12 | 3.00 | 0.080 | 0.070 | 0.071 | 0.126 | 0.0888 | 3 |
| 4 | 0.0538 | 0.0638 | 0.0308 | 0.4068 | 1.25 A | 0.980 | 2.71 | 0.077A | 0.067 | 0.071 | 0.126 | 0.0888 | 4 |
| 5 | 0.0568 | 0.0798 | 0.0288 | 0.4368 | 1.69 | 0.880 | 2.48 | 0.434A | 0.070 | 0.080 | 0.181 | 0.1008 | 5 |
| 6 | 0.0568 | 0.0718 | 0.0288 | 0.8108 | 1.68 | 0.801 | 3.32 | 0.388 | 0.082 | 0.088 | 0.183 | 0.1028 | 6 |
| 7 | 0.0608 | 0.0838 | 0.0288 | 0.4908 | 1.81 | 0.802 | 1.78 | 0.313 | 0.003 | 0.084 | 0.177 | 0.0908 | 7 |
| 8 | 0.0618 | 0.0648 | 0.0288 | 0.4808 | 1.38 | 0.848 | 1.48 | 0.263 | 0.018 | 0.101 | 0.237 | 0.0778 | 8 |
| 9 | 0.0648 | 0.0458 | 0.0288 | 0.4588 | 1.34 | 1.08 | 1.07 | 0.188 | 0.048 | 0.108 | 0.288 | 0.0818 | 9 |
| 10 | 0.0888 | 0.0388 | 0.0288 | 0.4848 | 1.33 | 1.08 | 0.838 | 0.140 | 0.088 | 0.110 | 0.248 | 0.0848 | 10 |
| 11 | 0.0718 | 0.0388 | 0.0408 | 0.4878 | 1.37 | 1.01 | 0.704 | 0.104 | 0.081 | 0.128 | 0.218 | 0.0888 | 11 |
| 12 | 0.0738 | 0.0348 | 0.0858 | 0.7448 | 1.18 | 1.07 A | 0.882A | 0.088A | 0.086 | 0.182 | 0.202 | 0.0888 | 12 |
| 13 | 0.0728 | 0.0408 | 0.0628 | 0.8808 | 1.11 | 2.21 | 0.888 | 0.0488 | 0.188 | 0.127 | 0.182 | 0.0838 | 13 |
| 14 | 0.0738 | 0.0428 | 0.0888 | 1.18 B | 1.06 | 3.06 | 0.843 | 0.0268 | 0.127 | 0.114 | 0.172 | 0.0798 | 14 |
| 15 | 0.0728 | 0.0388 | 0.0578 | 1.38 B | 0.884 | 2.83 | 0.784 | 0.018A | 0.120 | 0.114 | 0.163 | 0.0728 | 15 |
| 15 | 0.0718 | 0.0378 | 0.0488 | 2.32 B | 0.928 | 2.83 | 0.881 | 0.0148 | 0.108 | 0.118 | 0.152 | 0.0728 | 16 |
| 17 | 0.0738 | 0.0378 | 0.0498 | 2.80 B | 0.857 | 2.88 | 0.848 | 0.0428 | 0.084 | 0.128 | 0.138 | 0.0718 | 17 |
| 18 | 0.0748 | 0.0428 | 0.0488 | 3.37 B | 0.892 | 1.88 | 0.681 | 0.0478 | 0.084 | 0.128 | 0.118 | 0.0838 | 18 |
| 19 | 0.0768 | 0.0478 | 0.0488 | 3.83 B | 1.18 A | 1.38 A | 0.381 | 0.0358 | 0.078 | 0.142 | 0.116 | 0.0838 | 19 |
| 20 | 0.0788 | 0.0488 | 0.0498 | 3.81 B | 1.73 | 1.33 E | 0.338 | 2.11 | 0.088 | 0.144 | 0.1328 | 0.0808 | 20 |
| 21 | 0.0788 | 0.0428 | 0.0828 | 3.80 B | 1.77 | 1.78 A | 0.381 | 2.45 | 0.088 | 0.142 | 0.1328 | 0.0808 | 21 |
| 22 | 0.0788 | 0.0388 | 0.0888 | 3.80 B | 1.81 | 2.30 | 0.228 | 2.08 | 0.083 | 0.141 | 0.1288 | 0.0428 | 22 |
| 23 | 0.0748 | 0.0368 | 0.0828 | 3.21 B | 1.34 E | 2.13 | 0.193 | 1.42 | 0.028 | 0.138 | 0.1208 | 0.0438 | 23 |
| 24 | 0.0808 | 0.0378 | 0.0858 | 3.33 B | 1.27 E | 1.84 | 0.188 | 0.758 | 0.088 | 0.135 | 0.1188 | 0.0378 | 24 |
| 25 | 0.0838 | 0.0348 | 0.0898 | 3.88 | 1.88 | 1.77 | 0.181 | 0.488 | 0.083 | 0.132 | 0.1168 | 0.0388 | 25 |
| 26 | 0.0828 | 0.0308 | 0.0778 | 3.34 | 2.83 | 1.87 | 0.132 | 0.338 | 0.088 | 0.138 | 0.1188 | 0.0408 | 26 |
| 27 | 0.0838 | 0.0308 | 0.1128 | 2.95 | 2.82 | 1.40 A | 0.083 | 0.388 | 0.083 | 0.141 | 0.1188 | 0.0428 | 27 |
| 28 | 0.0838 | 0.0308 | 0.1488 | 2.58 | 3.02 | 1.30 E | 0.078 | 0.233 | 0.088 | 0.148 | 0.0988 | 0.0428 | 28 |
| 29 | 0.0838 | | 0.1588 | 2.18 | 2.18 | 1.41 A | 0.088 | 0.188 | 0.088 | 0.138 | 0.0828 | 0.0428 | 29 |
| 30 | 0.0838 | | 0.1618 | 1.90 | 1.73 | 2.28 | 0.088 | 0.188 | 0.088 | 0.138 | 0.0818 | 0.0418 | 30 |
| 31 | 0.0838 | | 0.1748 | | 1.41 | | 0.083 | 0.113 | | 0.138 | | 0.0428 | 31 |
| TOTAL | 2.188 | 1.383 | 1.843 | 83.881 | 47.412 | 48.021 | 28.337 | 13.844 | 2.883 | 3.878 | 4.488 | 3.088 | TOTAL |
| MEAN | 0.071 | 0.048 | 0.083 | 1.78 | 1.83 | 1.80 | 0.818 | 0.448 | 0.088 | 0.118 | 0.180 | 0.088 | MEAN |
| MAX | 0.083 | 0.084 | 0.178 | 3.83 | 3.02 | 3.08 | 3.00 | 2.45 | 0.137 | 0.148 | 0.288 | 0.103 | MAX |
| MIN | 0.048 | 0.030 | 0.028 | 0.188 | 0.857 | 0.801 | 0.083 | 0.014 | 0.003 | 0.071 | 0.081 | 0.027 | MIN |

### SUMMARY FOR THE YEAR 1989

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.572
MAXIMUM DAILY, 3.838 ON APR 19
MINIMUM DAILY, 0.003 ON SEP 7
MAXIMUM INSTANTANEOUS,
6.40 AT 20:01 CST ON APR 19

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 12 35 N
LONG 96 17 00 W
DRAINAGE AREA, 396 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 188 | JUL | 2 480 |
| FEB | 118 | AUG | 1 180 |
| MAR | 188 | SEP | 177 |
| APR | 4 838 | OCT | 317 |
| MAY | 4 180 | NOV | 388 |
| JUN | 4 188 | DEC | 181 |

TOTAL DISCHARGE, 18 888 dam³

## RED DEER LAKE NEAR BARROWS - STATION NO. 05LC003

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 281.488 | --- | 281.588A | --- | 281.688 | 281.747 | 281.713 | 281.622 | 281.708 | 281.624 | 281.747 | 281.780 | 1 |
| 2 | 281.502 | --- | --- | --- | 281.688 | 281.735 | 281.680 | 281.640 | 281.723 | 281.738 | 281.738A | 281.781 | 2 |
| 3 | 281.488A | --- | --- | --- | 281.703 | 281.726 | 281.678 | 281.603 | 281.725 | 281.700 | --- | 281.783 | 3 |
| 4 | --- | --- | --- | --- | 281.705 | 281.707 | 281.710 | 281.638 | 281.722 | 281.740 | --- | 281.784 | 4 |
| 5 | --- | --- | --- | 281.594A | 281.708 | 281.731 | 281.708 | 281.634 | 281.739 | 281.711 | --- | 281.747 | 5 |
| 6 | --- | --- | --- | --- | 281.709 | 281.781 | 281.693 | 281.603 | 281.748 | 281.737 | --- | 281.742 | 6 |
| 7 | --- | --- | --- | --- | 281.710 | 281.737 | 281.701 | 281.603 | 281.718 | 281.738 | --- | 281.742 | 7 |
| 8 | --- | --- | --- | --- | 281.709 | 281.720 | 281.714 | 281.607 | 281.737 | 281.714 | --- | 281.744 | 8 |
| 9 | --- | --- | --- | --- | 281.721 | 281.723 | 281.686 | 281.613 | 281.748 | 281.705 | --- | 281.740 | 9 |
| 10 | 281.548A | --- | --- | --- | 281.718 | 281.724 | 281.718 | 281.618 | 281.784 | 281.730 | --- | 281.737 | 10 |
| 11 | --- | --- | --- | --- | 281.717 | 281.748 | 281.708 | 281.614 | 281.785 | 281.671 | --- | 281.738 | 11 |
| 12 | --- | --- | --- | --- | 281.718 | 281.758 | 281.687 | 281.613 | 281.748 | 281.707 | --- | 281.736 | 12 |
| 13 | --- | --- | --- | --- | 281.713 | 281.707 | 281.688 | 281.613 | 281.787 | 281.781 | --- | 281.733 | 13 |
| 14 | --- | --- | --- | --- | 281.708 | 281.688 | 281.677 | 281.583 | 281.817 | 281.748 | --- | 281.731 | 14 |
| 15 | --- | --- | --- | --- | 281.674 | 281.686 | 281.671 | 281.586 | 281.814 | 281.738 | --- | 281.731 | 15 |
| 16 | --- | --- | --- | --- | 281.701 | 281.683 | 281.678 | 281.586 | 281.833 | 281.747 | --- | 281.728 | 16 |
| 17 | --- | --- | --- | --- | 281.711 | 281.683 | 281.688 | 281.676 | 281.818 | 281.708 | --- | 281.726 | 17 |
| 18 | --- | --- | --- | --- | 281.714 | 281.676 | 281.671 | 281.676 | 281.811 | 281.692 | --- | 281.721 | 18 |
| 19 | --- | --- | --- | --- | 281.718 | 281.688 | 281.683 | 281.606 | 281.805 | 281.692 | --- | 281.721 | 19 |
| 20 | --- | --- | --- | 281.597A | 281.676 | 281.621 | 281.671 | 281.589 | 281.803 | 281.731 | --- | 281.716 | 20 |
| 21 | --- | --- | --- | --- | 281.674 | 281.657 | 281.648 | 281.575 | 281.784 | 281.738 | --- | 281.713 | 21 |
| 22 | --- | --- | --- | --- | 281.648 | 281.674 | 281.631 | 281.584 | 281.785 | 281.730 | --- | 281.719 | 22 |
| 23 | --- | --- | --- | --- | 281.721 | 281.685 | 281.632 | 281.580 | 281.787 | 281.721 | --- | 281.722 | 23 |
| 24 | --- | --- | --- | --- | 281.758 | 281.686 | 281.640 | 281.578 | 281.788 | 281.734 | --- | 281.718 | 24 |
| 25 | --- | --- | --- | --- | 281.787 | 281.700 | 281.656 | 281.608 | 281.782 | 281.685 | --- | 281.710 | 25 |
| 26 | --- | --- | --- | --- | 281.722 | 281.708 | 281.684 | 281.583 | 281.787 | 281.728 | --- | 281.710 | 26 |
| 27 | --- | --- | --- | --- | 281.721 | 281.728 | 281.612 | 281.607 | 281.787 | 281.750 | 281.784A | 281.711 | 27 |
| 28 | --- | --- | --- | 281.594A | 281.723 | 281.722 | 281.613 | 281.691 | 281.748 | 281.675 | 281.783 | 281.704 | 28 |
| 29 | --- | | --- | 281.590 | 281.721 | 281.712 | 281.611 | 281.670 | 281.780 | 281.717 | 281.780 | 281.706 | 29 |
| 30 | --- | | --- | 281.597 | 281.701 | 281.702 | 281.604 | 281.597 | 281.613 | 281.748 | 281.788 | 281.708 | 30 |
| 31 | --- | | --- | | 281.728 | | 281.618 | 281.701 | | 281.778 | | 281.701 | 31 |
| MEAN | --- | --- | --- | --- | 281.710 | 281.707 | 281.663 | 281.613 | 281.771 | 281.728 | --- | 281.728 | MEAN |
| MAX | --- | --- | --- | --- | 281.787 | 281.781 | 281.716 | 281.701 | 281.833 | 281.824 | --- | 281.754 | MAX |
| MIN | --- | --- | --- | --- | 281.648 | 281.621 | 281.586 | 281.589 | 281.708 | 281.671 | --- | 281.701 | MIN |

WATER LEVELS IN METRES

### SUMMARY FOR THE YEAR 1988

MAXIMUM DAILY, 281.833 ON SEP 16

MAXIMUM INSTANTANEOUS,
281.882 AT 10:00 CST ON OCT 1

TYPE OF GAUGE - RECORDING
LOCATION - LAT 52 53 40 N
LONG 101 27 50 W

A - MANUAL GAUGE

NATURAL FLOW

DRAINAGE AREA,
14 200 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1913 ADJ.)

## RED DEER RIVER NEAR THE MOUTH - STATION NO. 05LC004

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.8908 | 0.2488 | 0B | 0.0058 | 9.33 | 13.3 | 8.42 | 5.06 | 11.3 | 12.6 | 11.0 | 7.848 | 1 |
| 2 | 0.8708 | 0.2308 | 0B | 0.0118 | 9.65 | 13.3 | 10.2 | 5.42 | 10.1 | 14.1 | 10.8 B | 7.768 | 2 |
| 3 | 0.8308 | 0.2138 | 0B | 0.0178 | 9.84 | 13.8 | 10.5 | 5.48 | 8.30 | 13.0 | 10.8 B | 7.688 | 3 |
| 4 | 0.8108 | 0.1958 | 0B | 0.1038 | 10.6 | 12.8 | 7.73 | 5.85 | 11.8 | 12.3 | 10.7 B | 7.558 | 4 |
| 5 | 0.7708 | 0.1778 | 0B | 0.2388 | 10.1 | 12.6 | 8.91 | 6.06 | 11.4 | 18.1 | 10.6 B | 7.518 | 5 |
| 6 | 0.7308 | 0.1608 | 0B | 0.3868 | 9.20 | 8.84 | 8.88 | 6.83 | 10.8 | 15.4 | 10.5 B | 7.438 | 6 |
| 7 | 0.7108 | 0.1428 | 0B | 0.5508 | 8.64 | 9.32 | 8.13 | 6.84 | 14.0 | 10.4 | 10.3 B | 7.358 | 7 |
| 8 | 0.6908 | 0.1248 | 0B | 0.8908 | 8.28 | 9.93 | 7.38 | 6.20 | 14.9 | 10.8 | 10.2 B | 7.278 | 8 |
| 9 | 0.6568 | 0.1068 | 0B | 0.8508 | 9.13 | 8.64 | 8.84 | 5.82 | 17.4 | 13.7 | 10.1 B | 7.188 | 9 |
| 10 | 0.6368 | 0.0898 | 0B | 0.8308 | 7.33 | 8.48 | 7.52 | 5.58 | 14.7 | 10.8 | 10.0 B | 7.108 | 10 |
| 11 | 0.6218 | 0.0718 | 0B | 0.4188 | 7.08 | 7.87 | 8.88 | 4.85 | 13.8 | 13.8 | 9.818 | 7.028 | 11 |
| 12 | 0.6038 | 0.0538 | 0B | 1.18 B | 8.03 | 8.88 | 7.27 | 5.18 | 15.0 | 12.0 | 9.808 | 6.848 | 12 |
| 13 | 0.5858 | 0.0358 | 0B | 4.30 B | 8.84 | 8.88 | 7.81 | 5.74 | 14.9 | 8.30 | 9.888 | 6.858 | 13 |
| 14 | 0.5678 | 0.0188 | 0B | 5.82 B | 8.88 | 8.44 | 7.43 | 5.48 | 13.2 | 9.20 | 9.888 | 6.778 | 14 |
| 15 | 0.5508 | 0 B | 0B | 5.44 B | 9.88 | 7.82 | 7.32 | 5.28 | 14.1 | 10.7 | 9.488 | 6.898 | 15 |
| 16 | 0.5328 | 0 B | 0B | 5.20 B | 8.74 | 7.08 | 7.04 | 4.80 | 12.4 | 8.88 | 9.378 | 6.818 | 16 |
| 17 | 0.5148 | 0 B | 0B | 4.30 B | 8.88 | 8.32 | 8.81 | 4.30 | 12.5 | 11.0 | 9.268 | 6.538 | 17 |
| 18 | 0.4968 | 0 B | 0B | 3.10 B | 8.82 | 8.72 | 8.88 | 5.28 | 15.3 | 8.84 | 9.158 | 6.448 | 18 |
| 19 | 0.4788 | 0 B | 0B | 1.98 B | 8.12 | 8.87 | 8.88 | 5.06 | 13.8 | 10.2 | 9.048 | 6.358 | 19 |
| 20 | 0.4618 | 0 B | 0B | 1.40 B | 8.81 | 8.18 | 8.74 | 4.88 | 14.8 | 8.42 | 8.838 | 6.268 | 20 |
| 21 | 0.4438 | 0 B | 0B | 2.20 B | 11.3 | 8.04 | 8.88 | 4.87 | 18.8 | 8.78 | 8.828 | 6.208 | 21 |
| 22 | 0.4288 | 0 B | 0B | 3.78 | 13.0 | 8.86 | 5.88 | 3.61 | 17.8 | 8.88 | 8.718 | 6.118 | 22 |
| 23 | 0.4088 | 0 B | 0B | 5.80 | 8.88 | 8.42 | 8.82 | 2.88 | 12.0 | 10.5 | 8.818 | 6.038 | 23 |
| 24 | 0.3908 | 0 B | 0B | 7.28 | 8.08 | 7.38 | 5.88 | 3.84 | 17.1 | 8.45 | 8.808 | 5.958 | 24 |
| 25 | 0.3728 | 0 B | 0B | 7.28 | 12.2 | 7.02 | 7.83 | 5.78 | 16.8 | 10.3 | 8.388 | 5.878 | 25 |
| 26 | 0.3568 | 0 B | 0B | 7.88 | 12.0 | 8.87 | 8.83 | 8.20 | 11.2 | 8.71 | 8.268 | 5.788 | 26 |
| 27 | 0.3378 | 0 B | 0B | 8.08 | 12.7 | 8.23 | 8.02 | 7.87 | 12.7 | 13.1 | 8.178 | 5.708 | 27 |
| 28 | 0.3188 | 0 B | 0B | 8.84 | 12.8 | 8.38 | 4.84 | 7.08 | 15.5 | 18.4 | 8.098 | 5.628 | 28 |
| 29 | 0.3018 | | 0B | 8.87 | 11.8 | 8.18 | 8.49 | 8.87 | 10.8 | 14.2 | 8.018 | 5.548 | 29 |
| 30 | 0.2848 | | 0B | 8.14 | 14.1 | 8.88 | 8.17 | 8.38 | 10.8 | 11.7 | 7.938 | 5.468 | 30 |
| 31 | 0.2688 | | 0L | | 13.3 | | 8.14 | 11.2 | | 11.2 | | 5.378 | 31 |
| TOTAL | 16.903 | 1.881 | 0 | 105.888 | 312.68 | 273.86 | 228.81 | 180.31 | 404.00 | 380.87 | 282.82 | 204.84 | TOTAL |
| MEAN | 0.545 | 0.068 | 0 | 3.53 | 10.1 | 9.12 | 7.31 | 5.14 | 13.5 | 11.8 | 9.43 | 6.81 | MEAN |
| MAX | 0.890 | 0.248 | 0 | 8.14 | 14.1 | 13.8 | 10.5 | 11.2 | 17.8 | 18.4 | 11.0 | 7.84 | MAX |
| MIN | 0.268 | 0 | 0 | 0.005 | 7.08 | 8.38 | 4.84 | 2.88 | 8.30 | 8.30 | 7.82 | 5.37 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

### SUMMARY FOR THE YEAR 1988

MEAN, 6.82
MAXIMUM DAILY, 18.4 ON OCT 28
MINIMUM DAILY, 0B ON FEB 18
MAXIMUM INSTANTANEOUS,
27.3 AT 16:12 CST ON OCT 5

TYPE OF GAUGE - RECORDING
LOCATION - LAT 52 52 45 N
LONG 101 02 35 W
DRAINAGE AREA, 14 900 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 1 490 | JUL | 19 800 |
| FEB | 181 | AUG | 18 400 |
| MAR | 0 | SEP | 36 900 |
| APR | 9 180 | OCT | 31 200 |
| MAY | 27 000 | NOV | 24 400 |
| JUN | 23 800 | DEC | 17 700 |

TOTAL DISCHARGE, 205 000 dam³

## RED RIVER ABOVE FLOODWAY CONTROL STRUCTURE - STATION NO. 05DC021

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 222.300E | 222.148 | 226.680 | 223.887 | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | 222.295E | 222.148 | 226.081 | 223.858 | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | 222.290E | 222.152 | 227.681 | 223.847 | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | 222.280E | 222.158 | 227.214 | 223.842 | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | 222.260E | 222.180 | 226.882 | 223.832 | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | 222.262A | 222.163 | 226.110 | 223.810 | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | 222.228 | 222.205 | 226.524 | 223.888 | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | 222.227 | 222.788 | 224.973 | 223.824 | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | 222.225 | 223.873 | 224.507 | 223.801 | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | 222.213 | 224.275 | 224.283 | 223.788 | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | 222.185 | 224.642 | 224.130 | 223.775 | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | 223.177 | 225.253 | 223.899 | 223.805 | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | 222.162 | 225.570 | 223.837 | 223.808A | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | 222.147 | 225.678 | 223.928 | 223.852 | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | 222.138 | 226.231 | 223.915 | 223.788 | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | 222.141 | 226.672 | 223.887 | 223.738 | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | 222.147 | 227.084 | 223.860 | 223.712 | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | 222.158 | 227.480 | 223.830 | 223.710 | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | 222.165 | 227.613 | 223.820 | 223.710 | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | 222.173 | 227.647 | 223.811 | 223.698 | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | 223.178 | 228.780 | 223.787 | 223.697 | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | 222.181 | 228.147 | 223.814 | 223.706 | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | 222.184 | 228.288 | 223.848 | 223.709 | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | 222.188 | 228.330 | 223.850 | 223.732 | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | 223.191 | 228.319 | 223.838 | 223.768 | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | 222.185 | 228.239 | 223.830 | 223.711 | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | 222.174 | 228.184 | 223.811 | 223.688 | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | 222.163 | 228.078 | 223.832 | 223.718 | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | 222.158 | 228.867 | 223.818 | 223.765 | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | 222.157 | 236.832 | 223.815 | 223.821A | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | 222.151 | | 223.833 | | --- | --- | | --- | | --- | 31 |
| MEAN | --- | --- | 222.198 | 226.048 | 224.875 | 223.780 | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | 222.300 | 228.330 | 226.680 | 223.909 | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | 222.139 | 222.148 | 223.787 | 223.688 | --- | --- | --- | --- | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MAXIMUM DAILY, 228.330 ON APR 24

MAXIMUM INSTANTANEOUS,
228.334 AT 10:23 CST ON APR 24

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1928 ADJ.)

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 45 10 N
LONG 97 05 00 W

A - MANUAL GAUGE
E - ESTIMATED
REGULATED

DRAINAGE AREA,
118 000 km²

## RED RIVER ABOVE RED RIVER FLOODWAY - STATION NO. 05DC026

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 228.782 | --- | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 228.235 | --- | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | 227.820 | --- | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 227.345 | --- | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 226.812 | --- | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | --- | --- | 226.260 | --- | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 225.884 | --- | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 225.198A | --- | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | --- | 225.384A | --- | --- | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | --- | 225.672A | --- | --- | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | --- | 225.888 | --- | --- | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | --- | 226.348 | --- | --- | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | --- | 226.838 | --- | --- | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | --- | 227.248 | --- | --- | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | --- | 227.607 | --- | --- | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | --- | 227.728 | --- | --- | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | --- | 228.057 | --- | --- | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | --- | 228.838 | --- | --- | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | --- | 228.274 | --- | --- | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | --- | 228.418 | --- | --- | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | --- | 228.448 | --- | --- | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | --- | 228.437 | --- | --- | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | --- | 228.351 | --- | --- | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | --- | 228.280 | --- | --- | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | --- | 228.208 | --- | --- | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | --- | 228.108 | --- | --- | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | --- | 228.045 | --- | --- | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | --- | | --- | | --- | --- | | --- | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MAXIMUM DAILY, 228.448 ON APR 24

MAXIMUM INSTANTANEOUS,
228.457 AT 15:07 CST ON APR 24

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1928 ADJ.)

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 43 35 N
LONG 97 07 49 W

A - MANUAL GAUGE

REGULATED

DRAINAGE AREA,
118 000 km²

## RED RIVER AT EMERSON - STATION NO. 05DC001

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8.858 | 8.048 | 9.878 | 16.38 | 753 | 109 | 85.1 | 14.1 | 12.8 | 11.8 | 10.4 | 10.0 B | 1 |
| 2 | 8.918 | 8.138 | 9.348 | 17.28 | 871 | 107 | 83.8 | 14.1 | 13.0 | 12.0 | 10.1 | 9.688 | 2 |
| 3 | 8.888 | 8.218 | 8.878 | 18.18 | 886 | 103 | 81.8 | 14.7 | 14.4 | 12.8 | 9.90 | 9.578 | 3 |
| 4 | 7.058 | 8.408 | 8.788 | 28.38 | 886 | 99.8 | 88.4 | 14.1 | 18.1 | 14.3 | 11.2 B | 9.728 | 4 |
| 5 | 7.138 | 8.808 | 8.808 | 80.48 | 383 | 97.2 | 84.1 | 13.3 | 47.1 | 14.8 | 12.4 B | 9.728 | 5 |
| 6 | 7.148 | 8.628 | 8.628 | 89.38 | 283 | 97.1 | 80.3 | 12.8 | 78.0 | 14.8 | 11.1 B | 9.888 | 6 |
| 7 | 7.218 | 8.108 | 8.578 | 181 B | 224 | 89.0 | 48.8 | 12.2 | 76.1 | 14.2 | 10.3 B | 9.418 | 7 |
| 8 | 7.268 | 8.508 | 8.688 | 193 B | 177 | 88.3 | 42.7 | 12.3 | 70.0 | 13.8 | 9.928 | 9.248 | 8 |
| 9 | 7.388 | 8.958 | 8.608 | 238 B | 148 | 85.1 | 38.3 | 12.3 | 63.5 | 13.1 | 9.638 | 9.078 | 9 |
| 10 | 7.288 | 10.2 B | 9.208 | 260 B | 138 | 80.0 | 36.8 | 12.3 | 57.4 | 12.2 | 10.5 B | 8.738 | 10 |
| 11 | 7.188 | 10.5 B | 8.488 | 318 B | 122 | 84.4 | 35.3 | 12.1 | 51.4 | 12.0 | 11.8 B | 8.288 | 11 |
| 12 | 7.218 | 10.7 B | 8.808 | 358 B | 118 | 81.5 | 34.8 | 12.1 | 44.7 | 12.6A | 10.5 B | 8.008 | 12 |
| 13 | 7.378 | 11.0 B | 8.818 | 384 B | 118 | 78.8 | 34.0 | 12.0 | 38.8 | 12.7A | 11.0 B | 7.828 | 13 |
| 14 | 7.818 | 11.1 B | 10.1 B | 437 B | 113 | 76.8 | 32.0 | 11.7 | 34.1 | 13.1A | 11.2 B | 7.648 | 14 |
| 15 | 7.838 | 11.2 B | 10.4 B | 511 B | 108 | 70.8 | 28.8 | 11.3 | 30.3 | 13.3A | 11.0 B | 7.488 | 15 |
| 16 | 7.528 | 11.5 B | 10.7 B | 600 B | 107 | 85.7 | 28.4 | 11.3 | 27.3 | 13.0A | 10.7 B | 7.288 | 16 |
| 17 | 7.498 | 11.8 B | 10.8 B | 708 B | 104 | 83.8 | 27.1 | 11.1 | 24.4 | 12.8A | 11.0 B | 7.158 | 17 |
| 18 | 7.488 | 11.6 B | 11.1 B | 838 B | 102 | 81.3 | 25.4 | 11.2 | 22.8 | 13.1A | 11.1 B | 6.888 | 18 |
| 19 | 7.488 | 12.2 B | 11.4 B | 860 B | 99.5 | 89.6 | 24.1 | 13.3 | 20.5 | 12.8A | 10.8 B | 6.698 | 19 |
| 20 | 7.488 | 12.8 B | 11.7 B | 1 070 B | 97.1 | 88.7A | 23.1 | 14.8 | 18.4 | 13.2A | 10.8 B | 6.318 | 20 |
| 21 | 7.458 | 13.1 B | 12.3 B | 1 180 | 88.0 | 88.0A | 22.0 | 15.2 | 17.0 | 11.8 | 10.8 B | 5.788 | 21 |
| 22 | 7.428 | 13.3 B | 12.7 B | 1 180 | 88.2 | 87.2A | 20.8 | 14.1 | 15.8 | 12.8 | 10.8 B | 5.438 | 22 |
| 23 | 7.448 | 13.1 B | 13.0 B | 1 200 | 87.8 | 86.7A | 19.8 | 12.0 | 13.8 | 13.7 | 10.3 B | 5.478 | 23 |
| 24 | 7.588 | 12.9 B | 13.2 B | 1 200 | 100 | 83.8A | 18.2 | 10.5 | 12.5 | 13.8 | 10.2 B | 5.728 | 24 |
| 25 | 7.738 | 12.2 B | 13.6 B | 1 170 | 100 | 83.5A | 17.1 | 9.26 | 12.8 | 13.3 | 10.3 B | 5.728 | 25 |
| 26 | 7.838 | 11.7 B | 14.0 B | 1 130 | 99.6 | 85.8A | 16.3 | 8.88 | 11.5 | 12.7 | 10.3 B | 5.488 | 26 |
| 27 | 7.808 | 11.2 B | 14.3 B | 1 080 | 99.5 | 84.8A | 15.4 | 8.68 | 11.1 | 12.0 | 10.3 B | 5.288 | 27 |
| 28 | 7.888 | 10.5 B | 14.5 B | 1 030 | 99.5 | 83.3A | 14.7 | 8.38 | 11.3 | 12.3 | 10.4 B | 5.018 | 28 |
| 29 | 7.958 | | 14.9 B | 948 | 102 | 88.8 | 14.4 | 11.8 | 11.0 | 11.3 | 10.4 B | 4.888 | 29 |
| 30 | 7.988 | | 15.4 B | 848 | 105 | 88.8 | 14.1 | 12.7 | 11.1 | 10.7 | 10.1 B | 4.768 | 30 |
| 31 | 8.008 | | 15.8 B | | 108 | | 14.0 | 12.8 | | 10.8 | | 4.538 | 31 |
| TOTAL | 230.60 | 301.15 | 348.37 | 15 244.5 | 5 047.2 | 2 288.6 | 999.1 | 378.29 | 887.9 | 388.1 | 318.85 | 226.88 | TOTAL |
| MEAN | 7.45 | 10.8 | 11.2 | 808 | 185 | 78.2 | 32.2 | 12.2 | 29.8 | 12.8 | 10.8 | 7.31 | MEAN |
| MAX | 8.00 | 13.3 | 15.8 | 1 200 | 753 | 109 | 85.1 | 15.2 | 78.0 | 14.8 | 12.4 | 10.0 | MAX |
| MIN | 6.85 | 8.04 | 8.57 | 16.3 | 95.0 | 83.5 | 14.0 | 8.88 | 11.0 | 10.8 | 9.83 | 4.53 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 84.0
MAXIMUM DAILY, 1 200 ON APR 23
MINIMUM DAILY, 4.538 ON DEC 31
MAXIMUM INSTANTANEOUS,
1 210 AT 22:14 CST ON APR 23

SUMMARY FOR THE YEAR 1989

INTERNATIONAL GAUGING STATION
TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 00 30 N
LONG 97 12 40 W
DRAINAGE AREA, 102 000 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 19 800 | JUL | 86 300 |
| FEB | 26 000 | AUG | 32 700 |
| MAR | 30 100 | SEP | 76 700 |
| APR | 1 880 000 | OCT | 34 200 |
| MAY | 522 000 | NOV | 27 500 |
| JUN | 196 000 | DEC | 19 600 |

TOTAL DISCHARGE, 2 850 000 dam³

## RED RIVER AT JAMES AVENUE PUMPING STATION - STATION NO. 05DJ015

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 221.123 | 221.311 | 221.447 | 221.253 | 226.138 | 223.649 | 223.858 | 223.681 | 223.610 | 223.834 | 222.313 | 221.188 | 1 |
| 2 | 221.137 | 221.291 | 221.444 | 221.310 | 226.073 | 223.612 | 223.825 | 223.614 | 223.614 | 223.808 | 222.128 | 221.228 | 2 |
| 3 | 221.150 | 221.281 | 221.442 | 221.401 | 226.772 | 223.617 | 223.813 | 223.648 | 223.618 | 223.811 | 221.801 | 221.238 | 3 |
| 4 | 221.180 | 221.280 | 221.444 | 221.488 | 226.618 | 223.822 | 223.833 | 223.640 | 223.808 | 223.813 | 221.682 | 221.228 | 4 |
| 5 | 221.178 | 221.287 | 221.444 | 221.488 | 226.030 | 223.624 | 223.877 | 223.588 | 223.818 | 223.808 | 221.548 | 221.219 | 5 |
| 6 | 221.181 | 221.285 | 221.441 | 221.488 | 224.821 | 223.617 | 223.828 | 223.893 | 223.823 | 223.801 | 221.372 | 221.237 | 6 |
| 7 | 221.212 | 221.288 | 221.436 | 221.528 | 224.210 | 223.598 | 223.588 | 223.588 | 223.851 | 223.826 | 221.213 | 221.284 | 7 |
| 8 | 221.232 | 221.303 | 221.448 | 221.707 | 223.811 | 223.620 | 223.588 | 223.588 | 223.725 | 223.841 | 221.181 | 221.288 | 8 |
| 9 | 221.218 | 221.308 | 221.451 | 222.240 | 223.614 | 223.620 | 223.808 | 223.602 | 223.725 | 223.818 | 221.177 | 221.282 | 9 |
| 10 | 221.227 | 221.308 | 221.480 | 222.948 | 223.681 | 223.624 | 223.618 | 223.596 | 223.718 | 223.807 | 221.168 | 221.287 | 10 |
| 11 | 221.224 | 221.310 | 221.437 | 223.588 | 223.858 | 223.608 | 223.630 | 223.588 | 223.682 | 223.811 | 221.171 | 221.284 | 11 |
| 12 | 221.243 | 221.318 | 221.378 | 223.840 | 223.588 | 223.682 | 223.681 | 223.588 | 223.858 | 223.824 | 221.124 | 221.282 | 12 |
| 13 | 221.248 | 221.324 | 221.342 | 224.141 | 223.600 | 223.704 | 223.645 | 223.580 | 223.828 | 223.828 | 221.158 | 221.287 | 13 |
| 14 | 221.249 | 221.344 | 221.327 | 224.381 | 223.828 | 223.865 | 223.618 | 223.578 | 223.825 | 223.808 | 221.144 | 221.278 | 14 |
| 15 | 221.260 | 221.362 | 221.330 | 224.738 | 223.851 | 223.834 | 223.619 | 223.583 | 223.822 | 223.803 | 221.133 | 221.288 | 15 |
| 16 | 221.282 | 221.368 | 221.328 | 225.230 | 223.881 | 223.608 | 223.802 | 223.611 | 223.815 | 223.584 | 221.120 | 221.287 | 16 |
| 17 | 221.281 | 221.363 | 221.323 | 225.583 | 223.826 | 223.803 | 223.827 | 223.628 | 223.808 | 223.808 | 221.102 | 221.288 | 17 |
| 18 | 221.282 | 221.372 | 221.321 | 226.718 | 223.588 | 223.618 | 223.858 | 223.687 | 223.588 | 223.617 | 221.080 | 221.284 | 18 |
| 19 | 221.281 | 221.380 | 221.316 | 226.820 | 223.618 | 223.617 | 223.885 | 223.648 | 223.687 | 223.802 | 221.087 | 221.248 | 19 |
| 20 | 221.273 | 221.393 | 221.323 | 226.948 | 223.802 | 223.605 | 223.823 | 223.823 | 223.800 | 223.584 | 221.108 | 221.240 | 20 |
| 21 | 221.268 | 221.401 | 221.328 | 226.587 | 223.810 | 223.802 | 223.818 | 223.828 | 223.807 | 223.487 | 221.108 | 221.242 | 21 |
| 22 | 221.262 | 221.408 | 221.328 | 226.708 | 223.685 | 223.821 | 223.843 | 223.804 | 223.807 | 223.384 | 221.110 | 221.247 | 22 |
| 23 | 221.260 | 221.412 | 221.318 | 226.884 | 223.681 | 223.825 | 223.844 | 223.824 | 223.828 | 223.347 | 221.138 | 221.247 | 23 |
| 24 | 221.261 | 221.426 | 221.288 | 226.508 | 223.678 | 223.848 | 223.841 | 223.833 | 223.807 | 223.188 | 221.137 | 221.248 | 24 |
| 25 | 221.261 | 221.440 | 221.283 | 226.484 | 223.643 | 223.871 | 223.828 | 223.823 | 223.808 | 223.081 | 221.180 | 221.280 | 25 |
| 26 | 221.288 | 221.448 | 221.281 | 226.448 | 223.632 | 223.813 | 223.808 | 223.588 | 223.847 | 222.981 | 221.188 | 221.249 | 26 |
| 27 | 221.277 | 221.448 | 221.276 | 226.438 | 223.633 | 223.588 | 223.802 | 223.578 | 223.821 | 222.833 | 221.208 | 221.244 | 27 |
| 28 | 221.272 | 221.451 | 221.271 | 226.408 | 223.631 | 223.825 | 223.801 | 223.577 | 223.807 | 222.638 | 221.208 | 221.242 | 28 |
| 29 | 221.288 | | 221.262 | 226.383 | 223.614 | 223.883 | 223.582 | 223.580 | 223.841 | 222.784 | 221.183 | 221.242 | 29 |
| 30 | 221.327 | | 221.262 | 226.280 | 223.618 | 223.884 | 223.573 | 223.615 | 223.588 | 222.822 | 221.177 | 221.242 | 30 |
| 31 | 221.288 | | 221.265 | | 223.648 | | 223.580 | 223.808 | | 222.474 | | 221.243 | 31 |
| MEAN | 221.234 | 221.384 | 221.388 | 224.348 | 224.017 | 223.834 | 223.823 | 223.808 | 223.833 | 223.381 | 221.288 | 221.261 | MEAN |
| MAX | 221.288 | 221.451 | 221.480 | 226.708 | 226.138 | 223.704 | 223.841 | 223.687 | 223.725 | 223.841 | 222.313 | 221.284 | MAX |
| MIN | 221.123 | 221.280 | 221.258 | 221.253 | 223.614 | 223.588 | 223.580 | 223.575 | 223.587 | 222.474 | 221.087 | 221.188 | MIN |

WATER LEVELS IN METRES

MEAN, 222.734
MAXIMUM DAILY, 226.708 ON APR 22
MINIMUM DAILY, 221.087 ON NOV 19
MAXIMUM INSTANTANEOUS,
226.772 AT 10:04 CST ON APR 22

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 53 45 N
LONG 97 07 50 W

REGULATED

DRAINAGE AREA,
270 000 km²

## RED RIVER BELOW FLOODWAY CONTROL STRUCTURE - STATION NO. 05DC020

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 228.135 | --- | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 227.985 | --- | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | 227.575 | --- | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 227.144A | --- | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | --- | 226.188 | --- | --- | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | --- | 226.483 | --- | --- | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | --- | 226.800 | --- | --- | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | --- | 226.148 | --- | --- | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | --- | 226.837 | --- | --- | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | --- | 227.035 | --- | --- | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | --- | 227.390 | --- | --- | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | --- | 227.436 | --- | --- | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | --- | 227.763 | --- | --- | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | --- | 228.584 | --- | --- | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | --- | 228.580 | --- | --- | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | --- | 228.601 | --- | --- | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | --- | 228.508 | --- | --- | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | --- | 228.488 | --- | --- | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | --- | 228.477 | --- | --- | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | --- | 228.471 | --- | --- | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | --- | 228.488 | --- | --- | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | --- | 228.435 | --- | --- | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | --- | 228.278 | --- | --- | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | --- | | --- | | --- | --- | | --- | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MAXIMUM DAILY, 228.690 ON APR 22

MAXIMUM INSTANTANEOUS,
228.880 AT 15:35 CST ON APR 21

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1928 ADJ.)

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 45 20 N
LONG 97 08 10 W

A - MANUAL GAUGE

REGULATED SINCE 1988

DRAINAGE AREA,
119 000 km²

## RED RIVER FLOODWAY NEAR ST. NORBERT - STATION NO. 05DC017

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 19.2 | --- | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 0 A | --- | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | --- | 0 | --- | --- | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | --- | 13.8 | --- | --- | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | --- | 88.0 | --- | --- | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | --- | 138 | --- | --- | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | --- | 138 | --- | --- | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | --- | 132 | --- | --- | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | --- | 113 | --- | --- | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | --- | 88.8 | --- | --- | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | --- | 88.7 | --- | --- | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | --- | 43.0 | --- | --- | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | --- | 36.1 | --- | --- | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | --- | | --- | | --- | --- | | --- | | --- | 31 |
| TOTAL | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | TOTAL |
| MEAN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MAXIMUM DAILY, 138 ON APR 24

MAXIMUM INSTANTANEOUS,
137 AT 13:10 CST ON APR 24

REMARKS - LOCAL INFLOW IS NOT MONITORED

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 45 24 N
LONG 97 07 38 W

A - MANUAL GAUGE

REGULATED SINCE 1988

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | --- |
| FEB | --- | AUG | --- |
| MAR | --- | SEP | --- |
| APR | --- | OCT | --- |
| MAY | --- | NOV | --- |
| JUN | --- | DEC | --- |

## RED RIVER NEAR LETELLIER - STATION NO. 05DC010

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 236.081 | --- | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 235.480 | --- | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | 234.785 | --- | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 233.890A | --- | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | --- | 236.286A | --- | --- | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | --- | 236.871 | --- | --- | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | --- | 236.813 | --- | --- | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | --- | 236.158 | --- | --- | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | --- | 236.488 | --- | --- | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | --- | 237.313 | --- | --- | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | --- | 237.628 | --- | --- | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | --- | 237.867 | --- | --- | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | --- | 237.718 | --- | --- | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | --- | 237.768 | --- | --- | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | --- | 237.748 | --- | --- | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | --- | 237.673 | --- | --- | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | --- | 237.638 | --- | --- | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | --- | 237.324 | --- | --- | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | --- | 237.008 | --- | --- | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | --- | 236.884 | --- | --- | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | --- | | --- | | --- | --- | | --- | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MIN |

WATER LEVELS IN METRES

MAXIMUM DAILY, 237.769 ON APR 24

MAXIMUM INSTANTANEOUS,
237.776 AT 13:51 CST ON APR 24

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1953 ADJ.)

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 48 07 54 N
LONG 97 15 19 W

A - MANUAL GAUGE

REGULATED

DRAINAGE AREA,
103 000 km²

## RED RIVER NEAR LOCKPORT - STATION NO. 05OJ010

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.68 | 18.18 | 24.48 | 30.08 | 1 170 | 128 | 108 | 18.7 | 20.8 | 28.8 | 28.5 | 17.88 | 1 |
| 2 | 13.88 | 18.18 | 24.68 | 31.78 | 1 110 | 128 | 108 | 18.4 | 20.8 | 32.0 | 24.3 | 18.48 | 2 |
| 3 | 14.08 | 18.38 | 24.88 | 34.08 | 888 | 130 | 104 | 18.2 | 20.3 | 28.8A | 22.0 | 17.88 | 3 |
| 4 | 14.08 | 18.38 | 25.28 | 36.68 | 871 | 127 | 102 | 21.2 | 19.8 | 30.8 | 20.5 | 17.88 | 4 |
| 5 | 14.08 | 18.38 | 24.98 | 38.08 | 748 | 124 | 100 | 20.4 | 20.2 | 30.7 | 19.0 | 18.88 | 5 |
| 6 | 13.88 | 18.88 | 24.88 | 43.08 | 821 | 118 | 98.8 | 20.4 | 21.2 | 28.8 | 17.5 | 19.88 | 6 |
| 7 | 13.68 | 17.08 | 24.78 | 47.08 | 817 | 117 | 92.0 | 19.6 | 28.8A | 29.8A | 18.1 | 20.18 | 7 |
| 8 | 13.48 | 17.28 | 24.78 | 48.18 | 431A | 118 | 88.8 | 18.3 | 50.1 | 27.8 | 18.3 | 19.88 | 8 |
| 9 | 13.38 | 17.18 | 25.08 | 134 B | 345E | 118 | 80.8 | 17.4 | 71.2 | 23.8 | 21.0 | 18.88 | 9 |
| 10 | 13.48 | 17.18 | 25.28 | 283 B | 277A | 115 | 78.8 | 18.8 | 81.0 | 21.4 | 23.4 | 20.18 | 10 |
| 11 | 13.48 | 17.78 | 25.38 | 332 | 228 | 110 | 73.8 | 18.1 | 88.0 | 20.5 | 28.88 | 20.08 | 11 |
| 12 | 13.38 | 18.28 | 25.38 | 380 | 189 | 107 | 71.1 | 18.5 | 86.0 | 21.8 | 28.48 | 19.58 | 12 |
| 13 | 13.38 | 18.88 | 25.48 | 411 A | 177 | 108 | 70.5 | 18.4 | 82.0 | 23.7 | 27.48 | 18.48 | 13 |
| 14 | 13.38 | 19.08 | 25.48 | 488 A | 184 | 110 | 87.7 | 18.8 | 78.0 | 24.6 | 24.18 | 18.48 | 14 |
| 15 | 13.48 | 19.38 | 25.88 | 803 | 188 | 108 | 84.1 | 18.0 | 71.0 | 23.9 | 23.08 | 17.78 | 15 |
| 16 | 13.48 | 19.78 | 25.88 | 853 | 148 | 104 | 80.8 | 19.2 | 85.0 | 24.7 | 18.38 | 17.18 | 16 |
| 17 | 13.68 | 20.08 | 25.88 | 834 | 144 | 98.5 | 89.8 | 17.5 | 88.0 | 24.2 | 18.88 | 18.78 | 17 |
| 18 | 13.68 | 20.28 | 26.08 | 732 | 140 | 92.8 | 82.8 | 22.5 | 81.0A | 28.1A | 18.88 | 18.48 | 18 |
| 19 | 13.88 | 20.28 | 26.18 | 638 | 135 | 88.8 | 80.8 | 20.1 | 48.0 | 29.2 | 17.88 | 18.88 | 19 |
| 20 | 13.88 | 20.28 | 26.38 | 848 | 130 | 85.8 | 47.1 | 37.0 | 40.0 | 23.8 | 17.88 | 18.88 | 20 |
| 21 | 13.88 | 20.68 | 26.38 | 1 040 A | 128 | 82.1 | 42.8A | 38.8 | 34.1 | 48.8 | 17.78 | 18.48 | 21 |
| 22 | 13.78 | 21.28 | 26.38 | 1 220 | 122 | 80.2 | 38.2E | 38.8 | 34.0 | 48.5 | 18.88 | 14.88 | 22 |
| 23 | 13.68 | 21.68 | 26.38 | 1 370 | 118 | 78.7 | 38.4E | 38.2 | 28.5 | 48.0 | 18.18 | 14.38 | 23 |
| 24 | 13.88 | 22.38 | 26.18 | 1 430 A | 117 | 78.0 | 33.2A | 38.2 | 24.1 | 44.0 | 17.88 | 14.08 | 24 |
| 25 | 14.18 | 22.98 | 26.18 | 1 430 | 118 | 78.1 | 31.3 | 31.0 | 25.2 | 43.8 | 18.08 | 13.78 | 25 |
| 26 | 14.58 | 23.28 | 26.38 | 1 400 | 118 | 80.2 | 28.2 | 18.0 | 25.3 | 41.0 | 18.38 | 13.38 | 26 |
| 27 | 14.68 | 23.38 | 26.38 | 1 370 | 118 | 78.8 | 27.8 | 17.8 | 22.8 | 38.8 | 18.48 | 13.08 | 27 |
| 28 | 15.08 | 23.68 | 26.68 | 1 330 | 118 | 83.0 | 26.0 | 17.4 | 24.8 | 37.0 | 18.78 | 13.08 | 28 |
| 29 | 15.28 | | 27.28 | 1 280 | 131 | 88.2 | 23.5 | 17.8 | 28.0 | 34.5 | 18.28 | 13.78 | 29 |
| 30 | 15.58 | | 27.88 | 1 230 | 131A | 87.3 | 21.7 | 18.7 | 27.5 | 32.5 | 18.58 | 14.08 | 30 |
| 31 | 15.88 | | 28.88 | | 124 | | 20.4 | 18.8 | | 29.5 | | 14.18 | 31 |
| TOTAL | 431.8 | 537.8 | 799.8 | 18 888.8 | 10 018 | 3 055.8 | 1 884.8 | 877.3 | 1 283.3 | 883.1 | 801.2 | 518.8 | TOTAL |
| MEAN | 13.9 | 19.2 | 25.8 | 883 | 323 | 102 | 81.1 | 21.8 | 43.1 | 31.0 | 30.0 | 18.7 | MEAN |
| MAX | 15.8 | 23.8 | 28.8 | 1 430 | 1 170 | 130 | 108 | 37.0 | 88.0 | 48.8 | 28.4 | 20.1 | MAX |
| MIN | 13.3 | 18.1 | 24.4 | 30.0 | 117 | 78.0 | 20.4 | 18.4 | 19.8 | 20.8 | 18.1 | 12.8 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 111
MAXIMUM DAILY, 1 430 ON APR 25
MINIMUM DAILY, 12.88 ON DEC 28

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 08 28 N
LONG 98 55 54 W
DRAINAGE AREA, 278 000 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
REGULATED

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 37 300 | JUL | 184 000 |
| FEB | 48 400 | AUG | 56 800 |
| MAR | 88 100 | SEP | 112 000 |
| APR | 1 880 000 | OCT | 83 100 |
| MAY | 888 000 | NOV | 81 800 |
| JUN | 284 000 | DEC | 44 800 |

TOTAL DISCHARGE, 3 488 000 dam³

REMARKS - THESE DATA ARE A SUMMATION FROM SEVEN UPSTREAM FLOW STATIONS

## RED RIVER NEAR ST. ADOLPHE - STATION NO. 05OC003

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | 222.867 | 229.477 | 224.038E | --- | --- | --- | --- | 232.378E | --- | 1 |
| 2 | --- | --- | --- | 222.688E | 229.286 | 224.043 | --- | --- | --- | --- | 232.348E | --- | 2 |
| 3 | --- | --- | --- | 222.644E | 228.834 | 224.023E | --- | --- | --- | --- | 232.130 | --- | 3 |
| 4 | --- | --- | --- | 222.633 | 228.333 | 224.003E | --- | --- | --- | --- | 232.138E | --- | 4 |
| 5 | --- | --- | --- | 222.670E | 227.731 | 223.982 | --- | --- | --- | --- | 232.160E | --- | 5 |
| 6 | --- | --- | --- | 222.717 | 227.021 | 223.981E | 223.678 | --- | --- | --- | 232.188E | --- | 6 |
| 7 | --- | --- | --- | 223.143E | 226.336 | 224.001 | 223.651E | --- | --- | --- | 232.181 | --- | 7 |
| 8 | --- | --- | --- | 223.666 | 225.778 | 223.981E | 223.624E | --- | --- | --- | 232.170E | --- | 8 |
| 9 | --- | --- | --- | 224.304E | 225.235 | 223.951 | 223.788E | --- | --- | --- | 232.175E | --- | 9 |
| 10 | --- | --- | --- | 226.040 | 224.783 | 223.945E | 223.789 | --- | --- | --- | 232.178E | --- | 10 |
| 11 | --- | --- | --- | 225.783 | 224.588 | 223.928E | 223.788E | --- | --- | --- | 232.178 | --- | 11 |
| 12 | --- | --- | --- | 226.107 | 224.388 | 223.913 | 223.748E | --- | --- | --- | 232.178E | --- | 12 |
| 13 | --- | --- | --- | 226.506 | 224.208 | 223.937E | 223.737E | --- | --- | --- | 232.181E | --- | 13 |
| 14 | --- | 222.387 | --- | 226.826 | 224.202 | 223.943 | 223.726 | 223.677 | --- | --- | 232.184 | --- | 14 |
| 15 | --- | --- | --- | 227.263 | 224.186 | 223.695E | 223.695E | 223.687E | --- | --- | --- | --- | 15 |
| 16 | --- | --- | --- | 227.777 | 224.127E | 223.648 | 223.663E | 223.618E | --- | --- | --- | --- | 16 |
| 17 | --- | --- | --- | 228.234 | 224.085 | 223.628E | 223.632 | 223.638E | --- | --- | --- | --- | 17 |
| 18 | --- | --- | --- | 228.688 | --- | 223.601E | 223.652E | 223.688 | --- | --- | --- | --- | 18 |
| 19 | --- | --- | --- | 228.036 | --- | 223.776 | 223.671 | 223.655E | 223.677 | --- | --- | --- | 19 |
| 20 | --- | --- | --- | 229.210 | --- | 223.773E | 223.687E | 223.653E | --- | 223.536 | --- | --- | 20 |
| 21 | --- | --- | --- | 229.877 | --- | 223.787E | 223.682 | 223.650E | --- | 223.438E | --- | --- | 21 |
| 22 | --- | --- | --- | 230.212 | --- | 223.782E | --- | 223.647E | --- | 223.344E | --- | --- | 22 |
| 23 | --- | --- | --- | 230.420 | --- | 223.757 | --- | 223.644 | --- | 223.262E | --- | --- | 23 |
| 24 | --- | --- | --- | 230.484 | --- | 223.767E | --- | 223.639E | --- | 223.180E | 222.189 | --- | 24 |
| 25 | --- | --- | --- | 230.483 | --- | 223.767E | --- | 223.635 | --- | 223.086 | --- | --- | 25 |
| 26 | --- | --- | --- | 230.450 | --- | 223.767 | --- | --- | --- | 222.887E | --- | --- | 26 |
| 27 | --- | --- | --- | 230.343 | --- | 223.781E | --- | --- | --- | 222.808 | --- | --- | 27 |
| 28 | --- | --- | --- | 230.262 | --- | 223.745 | --- | --- | --- | 222.615E | --- | --- | 28 |
| 29 | --- | | --- | 230.138 | --- | 223.634E | --- | --- | --- | 222.732E | --- | --- | 29 |
| 30 | --- | | --- | 229.864 | 224.022 | 223.824 | --- | --- | --- | 222.632 | --- | --- | 30 |
| 31 | --- | | --- | | 224.028E | | --- | --- | --- | 222.504E | | --- | 31 |
| MEAN | --- | --- | --- | 227.004 | --- | 223.880 | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | 230.483 | --- | 224.043 | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | 222.633 | --- | 223.745 | --- | --- | --- | --- | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MAXIMUM DAILY, 230.483 ON APR 25

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 40 50 N
LONG 97 06 52 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED

DRAINAGE AREA,
118 000 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## RED RIVER NEAR ST. NORBERT - STATION NO. 05OC006

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 1 010 | --- | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 975 | --- | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | 913 | --- | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | --- | 1 170 | --- | --- | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | --- | 1 130 | --- | --- | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | --- | 1 130 | --- | --- | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | --- | 1 120 | --- | --- | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | --- | 1 110 | --- | --- | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | --- | 1 110 | --- | --- | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | --- | 1 100 | --- | --- | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | --- | 1 090 | --- | --- | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | --- | 1 080 | --- | --- | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | --- | | --- | | --- | --- | | --- | | --- | 31 |
| TOTAL | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | TOTAL |
| MEAN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MIN |

### SUMMARY FOR THE MONTHS APR TO MAY

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 47 10 N
LONG 97 08 13 W
DRAINAGE AREA, 133 000 km²

REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | --- |
| FEB | --- | AUG | --- |
| MAR | --- | SEP | --- |
| APR | --- | OCT | --- |
| MAY | --- | NOV | --- |
| JUN | --- | DEC | --- |

REMARKS - DAILY DISCHARGES ARE PUBLISHED ONLY FOR PERIODS OF RED RIVER FLOODWAY OPERATION

## RED RIVER NEAR STE. AGATHE - STATION NO. 05DC012

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7.288 | 7.788 | 10.1 B | 15.28 1 040 | 113 | | 88.5 | 13.8 | 14.4 | 19.7 | 8.83 | 9.888 | 1 |
| 2 | 7.388 | 7.788 | 10.4 B | 15.88 832 | 114 | | 84.5 | 13.7 | 13.8 | 18.8 | 8.70 | 9.188 | 2 |
| 3 | 7.388 | 7.618 | 10.4 B | 16.78 827 | 112 | | 82.7 | 13.8 | 13.3 | 14.1 | 7.588 | 8.538 | 3 |
| 4 | 7.418 | 7.888 | 10.3 B | 17.88 788 | 108 | | 81.1 | 13.2 | 13.7 | 13.0 A | 8.218 | 9.048 | 4 |
| 5 | 7.148 | 7.868 | 10.2 B | 17.48 885 | 104 | | 78.7 | 18.0 | 14.4 | 14.0 | 8.148 | 9.318 | 5 |
| 6 | 6.888 | 8.018 | 9.878 | 20.78 478 A | 101 | | 76.5 | 15.1 | 22.2 | 18.4 | 8.23 | 9.478 | 6 |
| 7 | 6.998 | 8.058 | 9.978 | 44.08 383 A | 103 | | 70.8 | 14.1 | 43.5 | 16.1 A | 8.81 | 9.458 | 7 |
| 8 | 7.318 | 7.878 | 9.838 | 88.78 312 A | 101 | | 66.0 | 13.6 | 64.3 | 16.3 A | 7.88 | 9.368 | 8 |
| 9 | 7.208 | 8.058 | 8.838 | 188 B 247 | 98.0 | | 63.8 | 13.5 | 71.7 | 15.4 | 7.40 | 9.378 | 9 |
| 10 | 6.948 | 8.078 | 10.0 B | 208 B 202 | 95.8 | | 59.3 | 12.7A | 68.8 | 13.5 | 8.85 | 9.188 | 10 |
| 11 | 6.888 | 8.108 | 10.0 B | 252 B 173 | 91.6 | | 56.7 | 13.3 | 64.1 | 14.0 | 9.908 | 9.148 | 11 |
| 12 | 6.938 | 8.308 | 9.948 | 281 B 153 | 88.9 | | 55.7 | 12.5 | 57.8 | 14.2 | 7.538 | 9.078 | 12 |
| 13 | 7.048 | 8.388 | 9.928 | 327 B 140 | 90.3 | | 53.3 | 13.8 | 50.2 | 15.0 | 8.288 | 8.588 | 13 |
| 14 | 7.158 | 8.598 | 9.958 | 387 B 133 | 88.2 | | 50.5 | 13.0 | 42.7 | 14.4 | 8.738 | 7.958 | 14 |
| 15 | 6.948 | 8.718 | 10.1 B | 413 B 127 | 81.1 | | 48.1 | 12.9 | 36.3 | 15.7 | 7.428 | 7.408 | 15 |
| 16 | 7.018 | 8.788 | 10.2 B | 488 B 123 | 78.8 | | 45.0 | 13.3 | 31.7 | 14.4 | 8.588 | 7.038 | 16 |
| 17 | 7.188 | 8.858 | 10.2 B | 583 B 118 | 73.1 | | 42.8 | 13.3 | 28.7 | 15.1 | 8.098 | 6.778 | 17 |
| 18 | 7.218 | 8.658 | 10.2 B | 685 B 114 | 71.0 | | 41.2 | 15.4 | 21.8 | 14.5 | 8.448 | 6.638 | 18 |
| 19 | 7.208 | 8.788 | 10.2 B | 788 B 110 | 69.1 | | 38.8 | 16.2 | 20.8 | 12.5 | 8.528 | 6.478 | 19 |
| 20 | 7.188 | 8.788 | 10.1 B | 881 B 105 | 67.1 | | 35.0 | 15.2 | 19.7 | 13.1 | 8.378 | 6.178 | 20 |
| 21 | 7.178 | 8.008 | 10.1 B | 1 050 B 101 A | 85.6 | | 31.6 | 14.3 | 18.6 | 11.4 | 8.038 | 5.708 | 21 |
| 22 | 7.248 | 8.218 | 10.2 B | 1 170 88.1E | 84.6 | | 28.6 | 14.5 | 21.0 | 10.4 | 6.778 | 5.278 | 22 |
| 23 | 7.188 | 8.388 | 10.7 B | 1 200 88.6A | 84.0 | | 27.7 | 15.1 | 17.3 | 10.4 | 6.628 | 4.758 | 23 |
| 24 | 7.188 | 8.388 | 11.1 B | 1 220 100 | 83.5 | | 25.7 | 14.6 | 15.8 | 10.8 | 6.838 | 4.378 | 24 |
| 25 | 7.338 | 8.848 | 11.5 B | 1 220 101 | 84.9 | | 23.7 | 12.7 | 15.6 | 12.1 | 6.598 | 4.188 | 25 |
| 26 | 7.438 | 8.678 | 11.8 B | 1 210 101 | 84.8 | | 22.5 | 11.8 | 15.6 | 12.8 | 6.588 | 3.688 | 26 |
| 27 | 7.488 | 8.888 | 12.3 B | 1 180 101 | 87.1 | | 21.0 | 11.1 | 13.6 | 13.2 | 6.348 | 3.648 | 27 |
| 28 | 7.608 | 8.648 | 12.8 B | 1 170 102 | 71.8 | | 18.8 | 10.6 | 15.3 | 11.7 | 6.318 | 4.188 | 28 |
| 29 | 7.788 | | 13.6 B | 1 140 103 | 78.4 | | 17.1 | 11.8 | 14.8 | 11.0 | 8.728 | 4.188 | 29 |
| 30 | 7.858 | | 14.1 B | 1 090 108 | 86.0 | | 15.7 | 12.8 | 15.8 | 10.4 | 8.588 | 4.238 | 30 |
| 31 | 7.788 | | 14.5 B | - 109 | | | 14.0 | 14.5 | | 9.40 | | 4.188 | 31 |
| TOTAL | 224.67 | 241.01 | 334.78 | 17 388.2 | 6 143.7 | 2 538.3 | 1 483.6 | 426.3 | 676.3 | 416.80 | 252.72 | 215.61 | TOTAL |
| MEAN | 7.25 | 8.61 | 10.8 | 579 | 283 | 84.8 | 47.2 | 13.8 | 28.2 | 13.5 | 8.42 | 6.95 | MEAN |
| MAX | 7.85 | 8.84 | 14.5 | 1 220 1 040 | 114 | 88.8 | 88.5 | 16.5 | 71.7 | 19.7 | 9.56 | 9.65 | MAX |
| MIN | 6.88 | 7.78 | 9.82 | 15.2 88 6 | 83.5 | 14.0 | 10.6 | 13.3 | 9.40 | 8.80 | 3.84 | MIN | |

### SUMMARY FOR THE YEAR 1988

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 89.0
MAXIMUM DAILY, 1 220 ON APR 24
MINIMUM DAILY, 3.848 ON DEC 27
MAXIMUM INSTANTANEOUS,
1 220 AT 00:22 CST ON APR 25

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 33 40 N
LONG 97 10 52 W
DRAINAGE AREA, 115 000 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 19 400 | JUL | 138 000 |
| FEB | 20 800 | AUG | 38 800 |
| MAR | 28 800 | SEP | 78 700 |
| APR | 1 800 000 | OCT | 38 200 |
| MAY | 704 000 | NOV | 21 800 |
| JUN | 218 000 | DEC | 18 800 |

TOTAL DISCHARGE, 2 810 000 dam³

## RED SUCKER LAKE AT RED SUCKER LAKE - STATION NO. 04AC006

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | 28.823 | 28.823 | 28.806 | 28.806 | 28.782 | 28.868 | 28.814 | 28.746 | 28.782 | 28.848 | 30.021 | 1 |
| 2 | --- | 28.820 | 28.822 | 28.808 | 28.812 | 28.787 | 28.870 | 28.801 | 28.747 | 28.803 | 28.850 | 30.024 | 2 |
| 3 | --- | 28.818 | 28.818 | 28.807 | 28.818 | 28.780 | 28.856 | 28.781 | 28.747 | 28.808 | 28.848 | 30.027 | 3 |
| 4 | --- | 28.818 | 28.821 | 28.807 | 28.825 | 28.784 | 28.852 | 28.780 | 28.738 | 28.811 | 28.857 | 30.028 | 4 |
| 5 | --- | 28.822 | 28.819 | 28.806 | 28.837 | 28.812 | 28.847 | 28.783 | 28.733 | 28.821 | 28.867 | 30.033 | 5 |
| 6 | --- | 28.823 | 28.818 | 28.800 | 28.838 | 28.806 | 28.848 | 28.781 | 28.742 | 28.827 | 28.868 | 30.027 | 6 |
| 7 | --- | 28.821 | 28.814 | 28.806 | 28.841 | 28.807 | 28.850 | 28.781 | 28.788 | 28.827 | 28.878 | 30.021 | 7 |
| 8 | --- | 28.817 | 28.823 | 28.805 | 28.848 | 28.814 | 28.841 | 28.782 | 28.788 | 28.832 | 28.885 | 30.017 | 8 |
| 9 | --- | 28.820 | 28.820 | 28.805 | 28.857 | 28.821 | 28.834 | 28.785 | 28.784 | 28.833 | 28.847 | 30.014 | 9 |
| 10 | --- | 28.823 | 28.821 | 28.805 | 28.863 | 28.818 | 28.835 | 28.782 | 28.781 | 28.836 | 28.880 | 30.011 | 10 |
| 11 | --- | 28.823 | 28.818 | 28.808 | 28.877 | 28.826 | 28.831 | 28.777 | 28.781 | 28.840 | 30.007 | 30.007 | 11 |
| 12 | --- | 28.826 | 28.813 | 28.805 | 28.887 | 28.834 | 28.828 | 28.788 | 28.788 | 28.854 | 30.004 | 30.002 | 12 |
| 13 | --- | 28.826 | 28.817 | 28.808 | 28.888 | 28.844 | 28.834 | 28.786 | 28.788 | 28.858 | 29.988 | 29.998 | 13 |
| 14 | --- | 28.824 | 28.814 | 28.808 | 28.884 | 28.844 | 28.821 | 28.781 | 28.787 | 28.868 | 29.988 | 30.000 | 14 |
| 15 | --- | 28.820 | 28.811 | 28.809 | 28.814 | 28.848 | 28.822 | 28.748 | 28.778 | 28.863 | 30.001 | 30.000 | 15 |
| 16 | --- | 28.820 | 28.811 | 28.802 | 28.823 | 28.851 | 28.823 | 28.733 | 28.784 | 28.868 | 30.001 | 29.998 | 16 |
| 17 | --- | 28.834 | 28.810 | 28.807 | 28.838 | 28.850 | 28.827 | 28.734 | 28.783 | 28.874 | 30.000 | 29.983 | 17 |
| 18 | --- | 28.834 | 28.811 | 28.808 | 28.852 | 28.853 | 28.825 | 28.737 | 28.788 | 28.878 | 30.001 | 29.967 | 18 |
| 19 | --- | 28.837 | 28.806 | 28.805 | 28.853 | 28.857 | 28.824 | 28.728 | 28.782 | 28.878 | 30.006 | 29.968 | 19 |
| 20 | 28.821A | 28.836 | 28.803 | 28.807 | 28.874 | 28.868 | 28.835 | 28.782 | 28.780 | 28.871 | 30.018 | 29.982 | 20 |
| 21 | 28.823 | 28.833 | 28.800 | 28.803 | 28.883 | 28.879 | 28.834 | 28.745 | 28.780 | 28.867 | 30.014 | 29.981 | 21 |
| 22 | 28.824 | 28.829 | 28.806 | 28.800 | 28.704 | 28.877 | 28.837 | 28.737 | 28.788 | 28.877 | 30.018 | 29.978 | 22 |
| 23 | 28.827 | 28.827 | 28.808 | 28.804 | 28.713 | 28.880 | 28.832 | 28.721 | 28.772 | 28.887 | 30.017 | 29.978 | 23 |
| 24 | 28.828 | 28.830 | 28.808 | 28.808 | 28.718 | 28.878 | 28.827 | 28.733 | 28.788 | 28.888 | 30.011 | 29.978 | 24 |
| 25 | 28.821 | 28.826 | 28.804 | 28.802 | 28.704A | 28.878 | 28.834 | 28.741 | 28.788 | 28.879 | 30.013 | 29.977 | 25 |
| 26 | 28.826 | 28.824 | 28.802 | 28.802 | 28.710 | 28.886 | 28.828 | 28.729 | 28.781 | 28.888 | 30.012 | 29.972 | 26 |
| 27 | 28.826 | 28.823 | 28.807 | 28.802 | 28.724 | 28.872 | 28.814 | 28.738 | 28.788 | 28.887 | 30.013 | 29.972 | 27 |
| 28 | 28.831 | 28.823 | 28.803 | 28.803 | 28.730 | 28.864 | 28.812 | 28.747 | 28.800 | 28.918 | 30.012 | 29.988 | 28 |
| 29 | 28.830 | | 28.804 | 28.800 | 28.738 | 28.851 | 28.808 | 28.748 | 28.781 | 28.942 | 30.018 | 29.986 | 29 |
| 30 | 28.831 | | 28.806 | 28.806 | 28.760 | 28.862 | 28.811 | 28.748 | 28.787 | 28.938 | 30.020 | 29.987 | 30 |
| 31 | 28.828 | | 28.804 | | 28.787 | | 28.818 | 28.748 | | 28.942 | | 29.988 | 31 |
| MEAN | --- | 28.826 | 28.810 | 28.800 | 28.828 | 28.838 | 28.832 | 28.758 | 28.788 | 28.882 | 28.888 | 29.986 | MEAN |
| MAX | --- | 28.837 | 28.823 | 28.808 | 28.787 | 28.880 | 28.870 | 28.814 | 28.800 | 28.942 | 30.020 | 30.033 | MAX |
| MIN | --- | 28.817 | 28.804 | 28.800 | 28.808 | 28.782 | 28.808 | 28.721 | 28.733 | 28.782 | 28.848 | 29.968 | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MAXIMUM DAILY, 30.033 ON DEC 5
MINIMUM DAILY, 28.480 ON APR 23
MAXIMUM INSTANTANEOUS,
30.038 AT 18:01 CST ON DEC 3

WATER LEVELS ARE REFERRED TO ASSUMED DATUM

TYPE OF GAUGE - RECORDING
LOCATION - LAT 54 09 23 N
LONG 93 33 53 W

A - MANUAL GAUGE

NATURAL FLOW

## ...ER LAKE AT BROCHET - STATION NO. 05DB001

DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | --- | --- | 335.483 | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | --- | --- | --- | --- | 335.502 | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | --- | --- | 335.524 | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | --- | --- | --- | --- | 335.550 | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | --- | --- | --- | --- | 335.583 | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | --- | --- | --- | --- | 335.588 | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | --- | --- | --- | --- | 335.598 | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | --- | --- | --- | --- | 335.581 | --- | --- | --- | --- | --- | 8 |
| 9 | 335.088A | --- | --- | --- | --- | --- | 335.555 | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | --- | 334.802A | --- | --- | 335.582 | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | --- | 334.788 | --- | --- | 335.558 | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | --- | 334.802 | --- | --- | 335.558 | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | --- | 334.788 | --- | --- | 335.588 | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | --- | 334.801 | --- | --- | 335.577 | --- | 335.808A | --- | --- | --- | 14 |
| 15 | --- | --- | --- | 334.778 | --- | --- | 335.804 | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | --- | 334.788 | --- | --- | 335.811 | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | --- | 334.784 | --- | --- | 335.811 | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | --- | 334.827A | --- | --- | 335.818 | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | --- | --- | --- | 335.348A | 335.634 | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | --- | --- | --- | 336.393 | 335.639 | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | --- | --- | --- | 335.378 | 335.631 | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | --- | --- | --- | 336.363 | 335.664 | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | --- | --- | --- | 335.391 | 335.701 | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | --- | --- | --- | 335.388 | 335.850 | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | --- | --- | --- | 335.408 | 335.838A | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | --- | --- | --- | 335.395 | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | --- | --- | --- | 335.437 | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | --- | --- | --- | 335.458 | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | --- | --- | --- | 335.478 | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | --- | --- | --- | 335.478 | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | --- | | --- | | --- | --- | | --- | --- | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MIN |

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 57 52 50 N
LONG 101 40 00 W

A - MANUAL GAUGE

REGULATED SINCE 1930

DRAINAGE AREA,
62 600 km²

WATER LEVELS ARE REFERRED TO SASKATCHEWAN DEPARTMENT OF NATURAL RESOURCES DATUM

## RENNIE RIVER NEAR RENNIE - STATION NO. 05PG002

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.200 | 0.193 | 0.088 | 0.073 | 4.14 | 2.18 | 2.88 | 0.288 | 2.48 | 0.282 | 0.308 | 0.281 | 1 |
| 2 | 0.196 | 0.182 | 0.093 | 0.358 | 4.84 | 2.36 | 2.84 | 0.307 | 2.31 | 0.237 | 0.337 | 0.288 | 2 |
| 3 | 0.198 | 0.168 | 0.089 | 0.510 | 4.88 | 2.23 | 2.42 | 0.402 | 2.20 | 0.232 | 0.348 | 0.283 | 3 |
| 4 | 0.203 | 0.161 | 0.086 | 0.485 | 4.68 | 1.81 | 2.33 | 0.439 | 2.09 | 0.218 | 0.341 | 0.278 | 4 |
| 5 | 0.208 | 0.160 | 0.083 | 0.783 | 4.63 | 1.73 | 2.36 | 0.414 | 1.98 | 0.238 | 0.338 | 0.265 | 5 |
| 6 | 0.211 | 0.150 | 0.078 | 1.07 | 4.58 | 1.74 | 2.08 | 0.408 | 1.87 | 0.203 | 0.342 | 0.258 | 6 |
| 7 | 0.230 | 0.148 | 0.088 | 0.960 | 4.54 | 1.83 | 1.86 | 0.416 | 1.78 | 0.201 | 0.348 | 0.260 | 7 |
| 8 | 0.250 | 0.138 | 0.089 | 0.811 | 4.32 | 2.00 | 1.50 | 0.428 | 1.38 | 0.188 | 0.351 | 0.278 | 8 |
| 9 | 0.240 | 0.139 | 0.080 | 0.880 | 4.18 | 2.08 | 1.48 | 0.443 | 0.811 | 0.207 | 0.358 | 0.283 | 9 |
| 10 | 0.227 | 0.133 | 0.083 | 0.827 | 4.00 | 2.13 | 1.44 | 0.443 | 0.770 | 0.200 | 0.372 | 0.285 | 10 |
| 11 | 0.234 | 0.128 | 0.084 | 0.773 | 3.40 | 2.18 | 1.13 | 0.446 | 0.780 | 0.189 | 0.348 | 0.287 | 11 |
| 12 | 0.242 | 0.120 | 0.088 | 0.770 | 2.88 | 2.38 | 1.17 | 0.446 | 0.813 | 0.174 | 0.388 | 0.295 | 12 |
| 13 | 0.234 | 0.118 | 0.089 | 0.748 | 2.74 | 2.57 | 1.24 | 0.428 | 0.802 | 0.148 | 0.388 | 0.294 | 13 |
| 14 | 0.232 | 0.114 | 0.085 | 0.898 | 2.88 | 2.73 | 1.26 | 0.423 | 0.737 | 0.180 | 0.375 | 0.282 | 14 |
| 15 | 0.233 | 0.108 | 0.048 | 0.734 | 2.28 | 2.78 | 1.27 | 0.407 | 0.708 | 0.207 | 0.378 | 0.274 | 15 |
| 16 | 0.233 | 0.088 | 0.050 | 0.758 | 1.88 | 2.84 | 1.27 | 0.402 | 0.880 | 0.382 | 0.378 | 0.273 | 16 |
| 17 | 0.242 | 0.095 | 0.048 | 0.724 | 1.87 | 2.86 | 1.26 | 0.880 | 0.484 | 0.388 | 0.373 | 0.273 | 17 |
| 18 | 0.261 | 0.095 | 0.047 | 0.735 | 1.85 | 2.82 | 1.23 | 0.490 | 0.842 | 0.488 | 0.369 | 0.278 | 18 |
| 19 | 0.263 | 0.093 | 0.047 | 0.787 | 1.82 | 2.80 | 1.20 | 0.884 | 0.583 | 0.479 | 0.359 | 0.283 | 19 |
| 20 | 0.255 | 0.088 | 0.044 | 0.851 | 1.81 | 2.73 | 1.17 | 0.783 | 0.525 | 0.480 | 0.330 | 0.288 | 20 |
| 21 | 0.254 | 0.083 | 0.042 | 0.804 | 1.78 | 2.88 | 1.13 | 1.17 | 0.483 | 0.481 | 0.329 | 0.284 | 21 |
| 22 | 0.246 | 0.081 | 0.040 | 1.04 | 1.71 | 3.32 | 1.09 | 2.04 | 0.382 | 0.473 | 0.327 | 0.284 | 22 |
| 23 | 0.238 | 0.080 | 0.041 | 1.19 | 1.68 | 3.43 | 1.03 | 2.38 | 0.374 | 0.459 | 0.326 | 0.289 | 23 |
| 24 | 0.231 | 0.084 | 0.040 | 1.48 | 1.65 | 3.81 | 0.971 | 2.40 | 0.388 | 0.488 | 0.318 | 0.264 | 24 |
| 25 | 0.238 | 0.088 | 0.038 | 1.84 | 1.80 | 3.41 | 0.804 | 2.38 | 0.319 | 0.482 | 0.311 | 0.234 | 25 |
| 26 | 0.243 | 0.080 | 0.037 | 2.70 | 1.82 | 3.32 | 0.803 | 2.32 | 0.313 | 0.483 | 0.310 | 0.233 | 26 |
| 27 | 0.240 | 0.089 | 0.037 | 3.51 | 1.87 | 3.09 | 0.708 | 2.18 | 0.315 | 0.572 | 0.308 | 0.237 | 27 |
| 28 | 0.227 | 0.088 | 0.046 | 3.74 | 2.01 | 2.89 | 0.421 | 2.12 | 0.281 | 0.488 | 0.303 | 0.239 | 28 |
| 29 | 0.214 | | 0.048 | 3.97 | 2.03 | 2.80 | 0.208 | 2.53 | 0.272 | 0.481 | 0.298 | 0.234 | 29 |
| 30 | 0.208 | | 0.088 | 4.08 | 2.08 | 2.76 | 0.288 | 2.88 | 0.282 | 0.443 | 0.290 | 0.233 | 30 |
| 31 | 0.207 | | 0.088 | | 2.08 | | 0.288 | 2.80 | | 0.422 | | 0.237 | 31 |
| TOTAL | 7.137 | 3.300 | 1.802 | 38.879 | 88.20 | 78.41 | 40.388 | 33.628 | 27.788 | 10.881 | 10.298 | 8.183 | TOTAL |
| MEAN | 0.230 | 0.118 | 0.058 | 1.30 | 2.88 | 2.81 | 1.30 | 1.08 | 0.826 | 0.341 | 0.343 | 0.284 | MEAN |
| MAX | 0.263 | 0.193 | 0.093 | 4.08 | 4.88 | 3.61 | 2.88 | 2.88 | 2.48 | 0.572 | 0.388 | 0.287 | MAX |
| MIN | 0.188 | 0.080 | 0.037 | 0.073 | 1.85 | 1.73 | 0.208 | 0.288 | 0.272 | 0.148 | 0.290 | 0.233 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.885
MAXIMUM DAILY, 4.88 ON MAY 3
MINIMUM DAILY, 0.037 ON MAR 28
MAXIMUM INSTANTANEOUS,
4.80 AT 17:13 CST ON MAY 2

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 48 55 42 N
LONG 96 32 40 W
DRAINAGE AREA, 189 km²

REGULATED

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 618 | JUL | 3 480 |
| FEB | 288 | AUG | 2 910 |
| MAR | 158 | SEP | 2 400 |
| APR | 3 360 | OCT | 914 |
| MAY | 7 620 | NOV | 890 |
| JUN | 6 770 | DEC | 707 |

TOTAL DISCHARGE, 30 100 dam³

## RIVIERE AUX MARAIS NEAR CHRISTIE - STATION NO. 05DC022

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.004 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 B | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 1.00 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.3928 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.2878 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 1.88 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 2.80 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 1.28 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.638 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.441 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.370 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.086 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.023 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.010 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 8.910 | 0.017 | 0 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.287 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 2.80 | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.036
MAXIMUM DAILY, 2.80 ON APR 23
MINIMUM DAILY, 0B ON MAR 1

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 03 30 N
LONG 97 19 50 W
DRAINAGE AREA, 204 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 770 | OCT | 0 |
| MAY | 1.47 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, 771 dam³

## ROARING RIVER NEAR MINITONAS - STATION NO. 05LE005

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.044B | 0.0858 | 1.08 | 1.01 | 4.51 | 0.638 | 2.00 | 1.22 | --- | --- | 1 |
| 2 | --- | --- | 0.044B | 0.0678 | 0.995 | 0.905 | 3.37 | 0.491 | 1.80 | 1.33 | --- | --- | 2 |
| 3 | --- | --- | 0.044B | 0.0508 | 0.878 | 0.806 | 2.87 | 0.484 | 1.75 | 1.48 | --- | --- | 3 |
| 4 | --- | --- | 0.044B | 0.2388 | 0.828 | 0.716 | 1.84 | 0.737 | 1.61 | 1.81 | --- | --- | 4 |
| 5 | --- | --- | 0.044B | 1.20 B | 0.890A | 0.678 | 1.60 | 0.842 | 1.60 | 1.77 | --- | --- | 5 |
| 6 | --- | --- | 0.044B | 2.84 B | 0.871E | 0.831 | 1.22 | 0.922 | 1.85 | 1.88 | --- | --- | 6 |
| 7 | --- | --- | 0.044B | 2.81 B | 0.888E | 0.833 | 1.02 | 0.986 | 1.80 | 1.98 | --- | --- | 7 |
| 8 | --- | --- | 0.043B | 2.33 B | 0.852E | 0.684 | 0.884 | 0.882 | 1.84 | 2.12 | --- | --- | 8 |
| 9 | --- | --- | 0.043B | 1.82 B | 0.871E | 0.678 | 0.882 | 0.829 | 1.80 | 2.40 | --- | --- | 9 |
| 10 | --- | --- | 0.043B | 1.32 B | 0.888E | 0.838 | 0.794 | 0.787 | 2.61 | 2.43 | --- | --- | 10 |
| 11 | --- | --- | 0.043B | 1.33 B | 0.868E | 0.896 | 0.752 | 0.888 | 3.73 | 2.43 | --- | --- | 11 |
| 12 | --- | --- | 0.043B | 1.29 B | 0.832E | 0.855 | 0.718 | 0.898 | 2.82 | 2.48 | --- | --- | 12 |
| 13 | --- | --- | 0.043B | 1.38 B | 0.818E | 2.08 | 0.862 | 0.858 | 2.40 | 2.80 | --- | --- | 13 |
| 14 | --- | --- | 0.043B | 1.45 B | 0.808E | 8.72 | 0.591 | 0.453 | 2.14 | 2.81 | --- | --- | 14 |
| 15 | --- | --- | 0.043B | 1.47 B | 0.804E | 5.71 | 0.530 | 0.890 | 1.87 | 2.88 | --- | --- | 15 |
| 16 | --- | --- | 0.042B | 1.32 B | 0.798A | 4.78 | 0.484 | 0.732 | 1.58 | 2.84 | --- | --- | 16 |
| 17 | --- | --- | 0.042B | 1.14 B | 0.774 | 3.83 | 0.440 | 0.773 | 1.48 | 2.83 | --- | --- | 17 |
| 18 | --- | --- | 0.042B | 0.9968 | 0.886 | 3.24 | 0.394 | 0.804 | 1.38 | 2.85 | --- | --- | 18 |
| 19 | --- | --- | 0.042B | 0.8968 | 0.676 | 2.71 | 0.384 | 0.881 | 1.13 | 2.88 | --- | --- | 19 |
| 20 | --- | --- | 0.042B | 1.00 B | 0.871 | 2.26 | 0.340 | 0.880 | 1.02 | 2.87 | --- | --- | 20 |
| 21 | --- | --- | 0.042B | 1.48 | 0.648 | 1.88 | 0.310 | 0.837 | 1.08 | 2.88 | --- | --- | 21 |
| 22 | --- | --- | 0.041B | 1.89 | 0.883 | 1.59 | 0.273 | 0.881 | 1.04 | 2.70 | --- | --- | 22 |
| 23 | --- | --- | 0.041B | 2.32 | 0.716 | 1.38 | 0.253 | 1.34 | 1.08 | 2.72 | --- | --- | 23 |
| 24 | --- | --- | 0.041B | 2.84 | 0.731 | 1.24 | 0.251 | 1.17 | 1.10 | 2.71 | --- | --- | 24 |
| 25 | --- | --- | 0.041B | 2.85 | 0.947 | 1.13 | 0.287 | 1.14 | 1.13 | 2.75 | --- | --- | 25 |
| 26 | --- | --- | 0.041B | 2.15 | 1.38 | 1.20 | 0.325 | 1.15 | 1.03 | 2.79 | --- | --- | 26 |
| 27 | --- | --- | 0.041B | 1.88 | 1.87 | 2.24 | 0.415 | 1.23 | 0.978 | 2.82 | --- | --- | 27 |
| 28 | --- | --- | 0.041B | 1.57 | 1.71 | 5.12 | 0.511 | 1.40 | 1.01 | 3.08 | --- | --- | 28 |
| 29 | --- | | 0.042B | 1.32 | 1.52 | 5.80 | 0.645 | 1.75 | 1.00 | 2.848 | --- | --- | 29 |
| 30 | --- | | 0.044B | 1.18 | 1.36 | 5.48 | 0.714 | 2.31 | 0.998 | 2.788 | --- | --- | 30 |
| 31 | --- | | 0.047B | | 1.18 | | 0.783 | 2.24 | | 2.858 | | --- | 31 |
| TOTAL | --- | --- | 1.323 | 43.550 | 28.770 | 87.921 | 28.703 | 30.478 | 46.513 | 74.74 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.043 | 1.45 | 0.880 | 2.26 | 0.938 | 0.983 | 1.55 | 2.41 | --- | --- | MEAN |
| MAX | --- | --- | 0.047 | 2.84 | 1.87 | 8.12 | 4.51 | 2.31 | 2.73 | 3.08 | --- | --- | MAX |
| MIN | --- | --- | 0.041 | 0.055 | 0.649 | 0.584 | 0.251 | 0.453 | 0.978 | 1.22 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 1.32
MAXIMUM DAILY, 8.12 ON JUN 26
MINIMUM DAILY, 0.041B ON MAR 22
MAXIMUM INSTANTANEOUS, 8.88 AT 00:01 CST ON JUN 15

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 52 09 10 N
LONG 101 03 10 W
DRAINAGE AREA, 838 km²

A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 2 480 |
| FEB | --- | AUG | 2 630 |
| MAR | 114 | SEP | 4 020 |
| APR | 3 790 | OCT | 6 480 |
| MAY | 2 870 | NOV | --- |
| JUN | 8 870 | DEC | --- |

TOTAL DISCHARGE, 27 900 dam³

## ROCK LAKE NEAR GLENORA - STATION NO. 05OE027

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | 404.805 | --- | --- | 405.482 | 405.351 | 405.289 | 405.187A | 405.028 | 405.018 | 404.839 | 404.821 | 1 |
| 2 | --- | 404.803 | --- | --- | 405.486 | 405.337 | 405.310 | 405.183 | 405.019 | 404.998 | 404.837 | 404.838 | 2 |
| 3 | --- | 404.803 | --- | --- | 405.478 | 405.338 | 405.298 | 405.185 | 405.029 | 404.988 | 404.837 | 404.837 | 3 |
| 4 | --- | 404.805 | --- | --- | 405.413A | 405.328 | 405.281 | 405.189 | 405.041 | 404.957 | 404.838 | 404.848 | 4 |
| 5 | --- | 404.808 | --- | 405.074A | --- | 405.323 | 405.281 | 405.139 | 405.028 | 405.007 | 404.845 | 404.851 | 5 |
| 6 | --- | 404.808 | --- | --- | --- | 405.315 | 405.271 | 405.124 | 405.033A | 404.982 | 404.844 | 404.850 | 6 |
| 7 | --- | 404.810 | --- | --- | --- | 405.321 | 405.284 | 405.118 | 405.033E | 404.988 | 404.839 | 404.848 | 7 |
| 8 | --- | 404.805 | --- | --- | 405.448A | 405.317 | 405.259 | 405.114 | 405.032E | 404.982 | 404.844 | 404.849 | 8 |
| 9 | --- | 404.805 | --- | --- | 405.462 | 405.312 | 405.269 | 405.110 | 405.038E | 404.980 | 404.851 | 404.853 | 9 |
| 10 | --- | 404.808 | --- | --- | 405.430 | 405.303 | 405.264 | 405.104 | 405.038E | 404.974 | 404.863 | 404.859 | 10 |
| 11 | --- | 404.810E | --- | --- | 405.417 | 405.304 | 405.248 | 405.102 | 405.037E | 405.014 | 404.884 | 404.867 | 11 |
| 12 | --- | 404.813E | --- | 405.545A | 405.411 | 405.282 | 405.247 | 405.104 | 405.031A | 404.988 | 404.838 | 404.858 | 12 |
| 13 | --- | 404.813E | --- | 405.581 | 405.403 | 405.328 | 405.240 | 405.100 | 405.023 | 404.958 | 404.840 | 404.852 | 13 |
| 14 | --- | 404.813E | --- | 405.579 | 405.406 | 405.324 | 405.238 | 405.089 | 405.010 | 404.943 | 404.837 | 404.839A | 14 |
| 15 | --- | 404.813E | --- | 405.598 | 405.402 | 405.319 | 405.236 | 405.094 | 405.026 | 404.974 | 404.838 | --- | 15 |
| 16 | --- | 404.814E | --- | 405.610 | 405.387 | 405.318 | 405.230 | 405.086 | 405.008 | 404.958 | 404.832 | --- | 16 |
| 17 | --- | 404.816E | --- | 405.612 | 405.388 | 405.324 | 405.215A | 405.078 | 405.039 | 404.941 | 404.837 | --- | 17 |
| 18 | --- | 404.816E | --- | 405.608 | 405.400 | 405.318 | --- | 405.080 | 405.017 | 404.947 | 404.834 | --- | 18 |
| 19 | --- | 404.815E | --- | 405.603 | 405.408 | 405.305 | --- | 405.084 | 404.998 | 404.951 | 404.839 | --- | 19 |
| 20 | --- | 404.817E | --- | 405.601 | 405.424 | 405.326 | --- | 405.077 | 405.016 | 404.936 | 404.839 | --- | 20 |
| 21 | --- | 404.815A | --- | 405.600 | 405.388 | 405.307 | --- | 405.088 | 405.010 | 404.941 | 404.838 | --- | 21 |
| 22 | --- | --- | 404.818A | 405.583 | 405.374 | 405.294 | --- | 405.088 | 405.020 | 404.929 | 404.840 | --- | 22 |
| 23 | --- | --- | 404.821 | 405.571 | 405.368 | 405.293 | --- | 405.085 | 405.015 | 404.939 | 404.838 | --- | 23 |
| 24 | --- | --- | 404.821 | 405.567 | 405.373 | 405.283 | --- | 405.084 | 405.025 | 404.939 | 404.838 | --- | 24 |
| 25 | --- | --- | 404.821A | 405.589 | 405.392 | 405.289 | --- | 405.089 | 404.998 | 404.929 | 404.821 | --- | 25 |
| 26 | 404.810A | --- | --- | 405.543 | 405.378 | 405.334 | --- | 405.088 | 404.984 | 404.933 | 404.817 | --- | 26 |
| 27 | 404.810 | --- | --- | 405.537 | 405.384 | 405.281 | --- | 405.046 | 404.980 | 404.981 | 404.908 | --- | 27 |
| 28 | 404.810 | --- | --- | 405.531 | 405.354 | 405.285 | --- | 405.083 | 405.006 | 404.934 | 404.909 | --- | 28 |
| 29 | 404.811 | | --- | 405.523 | 405.345 | 405.289 | --- | 405.083 | 404.972 | 404.982 | 404.923 | --- | 29 |
| 30 | 404.814 | | --- | 405.501 | 405.348 | 405.291 | --- | 405.023 | 404.988 | 404.937 | 404.923 | --- | 30 |
| 31 | 404.811 | | --- | | 405.347 | | --- | 405.024 | | 404.929 | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | 405.314 | --- | 405.091 | 405.017 | 404.982 | 404.838 | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | 405.382 | --- | 405.189 | 405.041 | 405.018 | 404.884 | --- | MAX |
| MIN | --- | --- | --- | --- | --- | 405.295 | --- | 405.023 | 404.988 | 404.929 | 404.909 | --- | MIN |

WATER LEVELS IN METRES

MAXIMUM DAILY, 405.612 ON APR 17
MINIMUM DAILY, 404.803 ON FEB 2
MAXIMUM INSTANTANEOUS,
405.614 AT 11:30 CST ON APR 16

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 12 40 N
LONG 99 08 45 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED

DRAINAGE AREA,
3 630 km²

## ROLLING RIVER NEAR ERICKSON - STATION NO. 05MF008

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.0728 | 0.0618 | 0.0518 | 0.7118 | 0.888 | 0.802 | 1.36 | 0.227 | 0.118 | 0.093 | 0.0918 | 0.1208 | 1 |
| 2 | 0.0728 | 0.0608 | 0.0518 | 0.8088 | 0.788 | 0.802 | 1.28 | 0.204 | 0.122 | 0.110 | 0.0788 | 0.1258 | 2 |
| 3 | 0.0728 | 0.0588 | 0.0518 | 0.9548 | 0.886 | 0.676 | 1.26 | 0.178 | 0.127 | 0.088 | 0.0788 | 0.1088 | 3 |
| 4 | 0.0728 | 0.0598 | 0.0508 | 1.17 E | 0.618 | 0.477 | 1.19 | 0.184 | 0.130 | 0.079 | 0.0788 | 0.1228 | 4 |
| 5 | 0.0728 | 0.0578 | 0.0498 | 1.45 E | 0.577 | 0.448 | 1.12 | 0.130 | 0.134 | 0.087 | 0.0768 | 0.1348 | 5 |
| 6 | 0.0728 | 0.0578 | 0.0488 | 1.70 E | 0.574 | 0.372 | 0.982 | 0.118 | 0.136 | 0.103 | 0.0778 | 0.1278 | 6 |
| 7 | 0.0728 | 0.0588 | 0.0528 | 1.83 E | 0.554 | 0.384 | 0.908 | 0.097 | 0.138 | 0.101 | 0.0858 | 0.1048 | 7 |
| 8 | 0.0728 | 0.0558 | 0.0588 | 1.75 E | 0.542 | 0.422 | 0.848 | 0.092 | 0.146 | 0.088 | 0.0988 | 0.0968 | 8 |
| 9 | 0.0718 | 0.0558 | 0.0648 | 1.56 E | 0.536 | 0.564 | 0.786 | 0.092 | 0.183 | 0.080 | 0.1058 | 0.1238 | 9 |
| 10 | 0.0708 | 0.0548 | 0.0708 | 1.13 E | 0.528 | 0.857 | 0.814 | 0.092 | 0.148 | 0.078 | 0.1088 | 0.1348 | 10 |
| 11 | 0.0688 | 0.0548 | 0.0768 | 0.7918 | 0.521 | 0.880 | 0.882 | 0.090 | 0.141 | 0.125 | 0.1058 | 0.1288 | 11 |
| 12 | 0.0698 | 0.0548 | 0.0858 | 0.8078 | 0.511 | 0.884 | 1.10 | 0.089 | 0.129 | 0.147 | 0.1008 | 0.1168 | 12 |
| 13 | 0.0688 | 0.0558 | 0.1028 | 0.5788 | 0.511 | 1.26 | 1.27 | 0.088 | 0.131 | 0.073 | 0.1048 | 0.1128 | 13 |
| 14 | 0.0688 | 0.0558 | 0.1188 | 0.6008 | 0.502 | 2.71 | 1.48 | 0.087 | 0.128 | 0.088 | 0.1008 | 0.0988 | 14 |
| 15 | 0.0678 | 0.0558 | 0.1368 | 0.7138 | 0.496 | 4.29 | 1.88 | 0.088 | 0.128 | 0.106 | 0.1028 | 0.1048 | 15 |
| 16 | 0.0678 | 0.0558 | 0.1518 | 0.8818 | 0.484 | 5.90 | 1.81 | 0.088 | 0.128 | 0.078 | 0.0888 | 0.1018 | 15 |
| 17 | 0.0668 | 0.0558 | 0.1678 | 1.05 E | 0.448 | 8.37 | 1.87 | 0.088 | 0.113 | 0.078 | 0.0848 | 0.0888 | 17 |
| 18 | 0.0668 | 0.0558 | 0.1828 | 1.20 E | 0.446 | 8.85 | 1.88 | 0.088 | 0.097 | 0.087 | 0.0888 | 0.0848 | 18 |
| 19 | 0.0648 | 0.0558 | 0.1988 | 1.60 E | 0.493 | 8.02 | 1.88 | 0.091 | 0.082 | 0.047 | 0.0848 | 0.0778 | 19 |
| 20 | 0.0638 | 0.0548 | 0.2118 | 1.57 | 0.481 | 8.91 | 1.81 | 0.091 | 0.088 | 0.048 | 0.0828 | 0.0708 | 20 |
| 21 | 0.0638 | 0.0548 | 0.2278 | 1.48 | 0.468 | 8.73 | 1.31 | 0.081 | 0.073 | 0.043 | 0.0828 | 0.0768 | 21 |
| 22 | 0.0648 | 0.0538 | 0.2508 | 1.28 | 0.463 | 4.37 | 1.13 | 0.091 | 0.072 | 0.058 | 0.0888 | 0.0888 | 22 |
| 23 | 0.0638 | 0.0538 | 0.2718 | 1.30 | 0.508 | 3.18 | 1.03 | 0.090 | 0.070 | 0.061 | 0.0928 | 0.0678 | 23 |
| 24 | 0.0638 | 0.0528 | 0.2888 | 1.31 | 0.523 | 2.44 | 0.906 | 0.090 | 0.070 | 0.054 | 0.1328 | 0.0728 | 24 |
| 25 | 0.0638 | 0.0528 | 0.3108 | 1.34 | 0.550 | 2.06 | 0.796 | 0.092 | 0.070 | 0.070 | 0.1048 | 0.0748 | 25 |
| 26 | 0.0638 | 0.0518 | 0.3388 | 1.36 | 0.582 | 1.80 | 0.805 | 0.098 | 0.073 | 0.078 | 0.1048 | 0.0788 | 26 |
| 27 | 0.0638 | 0.0518 | 0.3928 | 1.40 | 0.558 | 1.88 | 0.691 | 0.103 | 0.118 | 0.080 | 0.1188 | 0.0768 | 27 |
| 28 | 0.0628 | 0.0518 | 0.4728 | 1.33 | 0.593 | 1.59 | 0.606 | 0.108 | 0.187 | 0.0888 | 0.1118 | 0.0848 | 28 |
| 29 | 0.0628 | | 0.5638 | 1.12 | 0.616 | 1.48 | 0.613 | 0.112 | 0.078 | 0.0788 | 0.1078 | 0.0888 | 29 |
| 30 | 0.0638 | | 0.6118 | 1.00 | 0.613 | 1.42 | 0.348 | 0.114 | 0.064 | 0.0788 | 0.1178 | 0.0868 | 30 |
| 31 | 0.0618 | | 0.6488 | | 0.615 | | 0.286 | 0.121 | | 0.0888 | | 0.0938 | 31 |
| TOTAL | 2.074 | 1.537 | 8.338 | 35.833 | 17.188 | 80.795 | 34.082 | 3.378 | 3.405 | 2.527 | 3.078 | 3.043 | TOTAL |
| MEAN | 0.067 | 0.055 | 0.204 | 1.19 | 0.583 | 2.69 | 1.10 | 0.109 | 0.114 | 0.083 | 0.098 | 0.098 | MEAN |
| MAX | 0.073 | 0.061 | 0.649 | 1.83 | 0.886 | 8.37 | 1.88 | 0.227 | 0.187 | 0.147 | 0.132 | 0.126 | MAX |
| MIN | 0.061 | 0.051 | 0.048 | 0.578 | 0.446 | 0.372 | 0.286 | 0.088 | 0.064 | 0.043 | 0.078 | 0.087 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.828
MAXIMUM DAILY, 8.37 ON JUN 17
MINIMUM DAILY, 0.043 ON OCT 21
MAXIMUM INSTANTANEOUS,
9.49 AT 12:51 CST ON JUN 17

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 31 12 N
LONG 99 59 27 W
DRAINAGE AREA, 760 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 178 | JUL | 2 940 |
| FEB | 133 | AUG | 292 |
| MAR | 848 | SEP | 294 |
| APR | 3 090 | OCT | 218 |
| MAY | 1 480 | NOV | 266 |
| JUN | 6 980 | DEC | 263 |

TOTAL DISCHARGE, 16 700 dam³

## ROSEAU RIVER ABOVE DOMINION CITY DAM (P.R. 200) - STATION NO. 05OD602

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 236.202E | 232.327 | 232.818E | 231.913E | 231.988 | 231.808E | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 235.788 | 232.127 | 232.628E | 231.907 | 231.864E | 231.888 | --- | --- | 2 |
| 3 | --- | --- | --- | --- | 236.228E | 231.987E | 232.851 | 231.838E | 231.880E | 231.848 | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 234.687E | 231.887 | 232.624E | 231.882 | 231.857E | 231.781 | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 234.148E | 231.858E | 232.808E | 231.828E | 231.853 | 231.788E | --- | --- | 5 |
| 6 | --- | --- | --- | --- | 233.805 | 231.883E | 232.572 | 231.888E | 231.834E | 231.785 | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 233.432E | 231.861 | 232.867 | 231.852 | 231.818 | 231.788E | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 233.242 | 231.808E | 232.528E | 231.837E | 231.808E | 231.808E | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 233.231 | 231.748 | 232.844E | 231.822 | 231.801 | 231.817E | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 233.177E | 231.861E | 232.733 | 231.884E | 231.803E | 231.827E | --- | --- | 10 |
| 11 | --- | --- | --- | --- | --- | 233.133E | 231.574E | 232.898E | 231.907 | 231.808E | 231.838E | --- | 11 |
| 12 | --- | --- | --- | 232.978 | 233.080 | 231.488 | 232.883 | 231.913E | 231.907 | 231.848E | --- | --- | 12 |
| 13 | --- | --- | --- | 233.224 | 232.951E | 231.483E | 232.531E | 231.919E | 231.888E | 231.859E | --- | --- | 13 |
| 14 | --- | --- | --- | 233.888E | 232.882E | 231.440E | 232.388E | 231.925 | 231.870 | 231.869E | --- | --- | 14 |
| 15 | --- | --- | --- | 234.148E | 233.783E | 231.416 | 232.267 | 231.908E | 231.893E | 231.880E | --- | --- | 15 |
| 16 | --- | --- | --- | 234.611 | 232.883 | 231.487E | 232.361E | 231.888 | 231.918 | 231.880E | --- | --- | 16 |
| 17 | --- | --- | --- | 236.285E | 232.588E | 231.817 | 232.418E | 231.907 | 231.923E | 231.861 | --- | --- | 17 |
| 18 | --- | --- | --- | 235.920E | 232.477 | 231.840E | 232.488 | 231.928E | 231.947 | 231.808E | --- | --- | 18 |
| 19 | --- | --- | --- | 236.574E | 232.098 | 231.784 | 232.093E | 231.988E | 231.923E | 231.810 | --- | --- | 19 |
| 20 | --- | --- | --- | 237.228 | 231.977E | 231.888 | 231.897 | 231.988E | 231.920E | 231.877 | --- | --- | 20 |
| 21 | --- | --- | --- | 237.373E | 231.888 | 231.888E | 231.847 | 232.028E | 231.907 | --- | --- | --- | 21 |
| 22 | --- | --- | --- | 237.517E | 231.828E | 231.828 | 231.488E | 232.089 | 231.888 | --- | --- | --- | 22 |
| 23 | --- | --- | --- | 237.662 | 231.784 | 231.988E | 231.383E | 231.974 | 231.887E | --- | --- | --- | 23 |
| 24 | --- | --- | --- | 237.827E | 232.023 | 231.182E | 231.301 | 232.021E | 231.877E | --- | --- | --- | 24 |
| 25 | --- | --- | --- | 237.582 | 233.002E | 232.315 | 231.224E | 232.089 | 231.888E | --- | --- | --- | 25 |
| 26 | --- | --- | --- | 237.410E | 231.880 | 232.527E | 231.148 | 232.088E | 231.855 | --- | --- | --- | 26 |
| 27 | --- | --- | --- | 237.228 | 233.017E | 232.739 | 231.858E | 232.103E | 231.878E | --- | --- | --- | 27 |
| 28 | --- | --- | --- | 237.031E | 232.083 | 232.863E | 231.862 | 232.120 | 231.901 | --- | --- | --- | 28 |
| 29 | --- | --- | --- | 236.833E | 232.087E | 232.587 | 231.848E | 232.048E | 231.910E | --- | --- | --- | 29 |
| 30 | --- | --- | --- | 236.635 | 232.140E | 232.803E | 231.833E | 231.977 | 231.919 | --- | --- | --- | 30 |
| 31 | --- | --- | --- | | 232.184E | | 231.919 | 231.873E | | --- | --- | --- | 31 |
| MEAN | --- | --- | --- | --- | 232.948 | 231.935 | 232.173 | 231.986 | 231.912 | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 238.202 | 232.738 | 232.733 | 232.130 | 231.988 | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 231.784 | 231.416 | 231.148 | 231.822 | 231.865 | --- | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 08 43 N
LONG 97 09 48 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1957

DRAINAGE AREA,
5 890 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

REMARKS - PRIOR TO 1988 PUBLISHED AS "NEAR DOMINION CITY"

## ROSEAU RIVER AT GARDENTON - STATION NO. 05OD004

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.0095 | 0.0788 | 39.1 | 15.1 | 22.0 | 1.08 | 0.838 | 0.304 | --- | --- | 1 |
| 2 | --- | --- | 0.0095 | 0.0888 | 38.8 | 13.5 | 22.4 | 1.02 | 0.718 | 0.301 | --- | --- | 2 |
| 3 | --- | --- | 0.0095 | 0.0978 | 40.4 | 11.7 | 22.8 | 1.93 | 0.851 | 0.303 | --- | --- | 3 |
| 4 | --- | --- | 0.0095 | 0.0888 | 40.8 | 9.87 | 22.4 | 1.10 | 0.587 | 0.217 | --- | --- | 4 |
| 5 | --- | --- | 0.0095 | 0.1088 | 38.8 | 8.44 | 22.3 | 0.780 | 0.530 | 0.244 | --- | --- | 5 |
| 6 | --- | --- | 0.0088 | 0.1028 | 40.8 | 7.15A | 22.2 | 0.827 | 0.480 | 0.240 | --- | --- | 6 |
| 7 | --- | --- | 0.0088 | 0.0958 | 41.0 | 8.37A | 22.1 | 0.883 | 0.410 | 0.233 | --- | --- | 7 |
| 8 | --- | --- | 0.0088 | 0.0828 | 40.2 | 9.84 | 23.0 | 0.748 | 0.388 | 0.234 | --- | --- | 8 |
| 9 | --- | --- | 0.0088 | 0.3278 | 39.3 | 8.03 | 22.9 | 1.26 | 0.383 | 0.230 | --- | --- | 9 |
| 10 | --- | --- | 0.0088 | 1.74 B | 38.4 | 8.70 | 21.7 | 1.34 | 0.395 | 0.218 | --- | --- | 10 |
| 11 | --- | --- | 0.0088 | 3.33 B | 37.3 | 7.02 | 21.3 | 1.09 | 0.408 | 0.238 | --- | --- | 11 |
| 12 | --- | --- | 0.0088 | 3.72 B | 36.9 | 7.33 | 20.8 | 0.893 | 0.434 | 0.241 | --- | --- | 12 |
| 13 | --- | --- | 0.0088 | 4.14 B | 34.0 | 8.75 | 19.3 | 0.788 | 0.412 | 0.244 | --- | --- | 13 |
| 14 | --- | --- | 0.0088 | 5.81 B | 31.8 | 10.7 | 17.7 | 0.847 | 0.344 | 0.242 | --- | --- | 14 |
| 15 | --- | --- | 0.0128 | 9.12 B | 28.0 | 12.4 | 16.0 | 0.890 | 0.299 | 0.248 | --- | --- | 15 |
| 16 | --- | --- | 0.0208 | 8.10 B | 25.2 | 14.1 | 14.0 | 0.912 | 0.255 | 0.243 | --- | --- | 16 |
| 17 | --- | --- | 0.0208 | 8.38 B | 20.4 | 14.8 | 11.8 | 0.428 | 0.231 | 0.294 | --- | --- | 17 |
| 18 | --- | --- | 0.0208 | 12.7 B | 16.8 | 14.8 | 9.85 | 0.590 | 0.228 | 0.287 | --- | --- | 18 |
| 19 | --- | --- | 0.0208 | 16.0 B | 13.8 | 13.8 | 8.09 | 1.61 | 0.209 | 0.267 | --- | --- | 19 |
| 20 | --- | --- | 0.0208 | 30.3 B | 12.7 | 12.3 | 6.86 | 1.07 | 0.213 | 0.258 | --- | --- | 20 |
| 21 | --- | --- | 0.0208 | 36.8 | 11.8 | 11.5 | 5.88 | 0.834 | 0.204 | 0.251 | --- | --- | 21 |
| 22 | --- | --- | 0.0208 | 39.8 | 11.8 | 13.2 | 4.76 | 0.505 | 0.187 | 0.287 | --- | --- | 22 |
| 23 | --- | --- | 0.0208 | 38.1 | 11.0 | 17.0 | 4.08 | 0.872 | 0.174 | 0.241 | --- | --- | 23 |
| 24 | --- | --- | 0.0208 | 35.6 | 10.4 | 19.4 | 3.48 | 1.82 | 0.182 | 0.231 | --- | --- | 24 |
| 25 | --- | --- | 0.0208 | 35.7 | 11.0 | 20.6 | 2.92 | 2.18 | 0.181 | 0.280 | --- | --- | 25 |
| 26 | --- | --- | 0.0208 | 35.6 | 12.8 | 21.1 | 2.47 | 3.08 | 0.188 | 0.337 | --- | --- | 26 |
| 27 | --- | --- | 0.0208 | 36.8 | 15.7 | 21.4 | 2.15 | 1.82 | 0.178 | 0.381 | --- | --- | 27 |
| 28 | --- | --- | 0.0308 | 36.7 | 17.3 | 21.6 | 1.84 | 1.58 | 0.182 | 0.337 | --- | --- | 28 |
| 29 | --- | | 0.0388 | 37.6 | 17.8 | 21.8 | 1.61 | 1.20 | 0.184 | 0.331 | --- | --- | 29 |
| 30 | --- | | 0.0488 | 38.2 | 17.3 | 22.1 | 1.58 | 0.898 | 0.201 | 0.402 | --- | --- | 30 |
| 31 | --- | | 0.0788 | | 16.4 | | 1.34 | 0.842 | | 0.388 | | --- | 31 |
| TOTAL | --- | --- | 0.871 | 449.148 | 810.0 | 396.40 | 396.98 | 32.888 | 10.113 | 8.188 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.018 | 15.0 | 26.1 | 13.2 | 12.8 | 1.06 | 0.337 | 0.264 | --- | --- | MEAN |
| MAX | --- | --- | 0.078 | 36.3 | 41.0 | 23.1 | 22.8 | 3.18 | 0.838 | 0.402 | --- | --- | MAX |
| MIN | --- | --- | 0.008 | 0.078 | 10.4 | 5.84 | 1.34 | 0.428 | 0.188 | 0.201 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 8.80
MAXIMUM DAILY, 41.0 ON MAY 7
MINIMUM DAILY, 0.0088 ON MAR 1
MAXIMUM INSTANTANEOUS,
41.5 AT 14:47 CST ON MAY 4

### SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 08 18 N
LONG 96 41 15 W
DRAINAGE AREA, 4 380 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 34 600 |
| FEB | --- | AUG | 2 810 |
| MAR | 83.3 | SEP | 874 |
| APR | 38 600 | OCT | 707 |
| MAY | 70 000 | NOV | --- |
| JUN | 34 200 | DEC | --- |

TOTAL DISCHARGE, 182 000 dam³

## ROSEAU RIVER NEAR CARIBOU - STATION NO. 05DD030

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1969

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.054 | 0.0458 | 0.0318 | 0.1868 | 37.4 | 14.4 | 21.7 | 0.708 | 0.878 | 0.190 | 0.181 | 0.130 | 1 |
| 2 | 0.054 | 0.0458 | 0.0318 | 0.2568 | 37.8 | 12.8 | 21.8 | 0.851 | 0.765 | 0.181 | 0.130 | 0.147 | 2 |
| 3 | 0.054 | 0.0458 | 0.0318 | 0.3118 | 37.9 | 11.2 | 22.1 | 0.765 | 0.851 | 0.181 | 0.118 | 0.144 | 3 |
| 4 | 0.051 | 0.0458 | 0.0318 | 0.3968 | 37.9 | 9.57 | 21.8 | 0.680 | 0.680 | 0.144 | 0.127 | 0.144 | 4 |
| 5 | 0.051 | 0.0428 | 0.0288 | 0.4618 | 37.1 | 8.18 | 21.9 | 0.596 | 0.538 | 0.147 | 0.173 | 0.133 | 5 |
| 6 | 0.051 | 0.0428 | 0.0288 | 0.5958 | 36.5 | 8.80 | 22.0 | 0.566 | 0.453 | 0.142 | 0.227 | 0.138 | 6 |
| 7 | 0.054 | 0.0428 | 0.0288 | 0.8498 | 36.2 | 8.05 | 21.9 | 0.793 | 0.453 | 0.126 | 0.244 | 0.113 | 7 |
| 8 | 0.054 | 0.0428 | 0.0288 | 1.13 B | 35.7 | 8.88 | 21.8 | 1.10 | 0.453 | 0.127 | 0.311 | 0.088 | 8 |
| 9 | 0.054 | 0.0428 | 0.0288 | 1.42 B | 34.8 | 8.88 | 21.7 | 1.19 | 0.481 | 0.167 | 0.286 | 0.082 | 9 |
| 10 | 0.054 | 0.0408 | 0.0278 | 1.70 B | 33.4 | 8.20 | 21.3 | 1.08 | 0.453 | 0.159 | 0.269 | 0.086 | 10 |
| 11 | 0.054 | 0.0408 | 0.0278 | 2.12 B | 32.0 | 8.12 | 20.5 | 0.963 | 0.453 | 0.181 | 0.278 | 0.057 | 11 |
| 12 | 0.054 | 0.0408 | 0.0278 | 2.83 B | 30.0 | 8.17 | 19.4 | 0.878 | 0.481 | 0.150 | 0.236 | 0.051 | 12 |
| 13 | 0.054 | 0.0408 | 0.0288 | 4.25 B | 27.9 | 7.05 | 17.8 | 0.793E | 0.368 | 0.127 | 0.340 | 0.042 | 13 |
| 14 | 0.054 | 0.0408 | 0.0288 | 5.66 B | 25.4 | 9.15 | 16.2 | 0.651E | 0.289 | 0.138 | 0.340 | 0.034 | 14 |
| 15 | 0.054 | 0.0378 | 0.0278 | 7.08 B | 22.4 | 11.0 | 14.3 | 0.595E | 0.229 | 0.178 | 0.340 | 0.031 | 15 |
| 16 | 0.054 | 0.0378 | 0.0288 | 8.81 B | 18.6 | 12.3 | 12.1 | 0.566 | 0.204 | 0.158 | 0.283 | 0.027 | 15 |
| 17 | 0.054 | 0.0378 | 0.0288 | 12.7 B | 14.9 | 13.8 | 9.97 | 0.538 | 0.178 | 0.161 | 0.238 | 0.021 | 17 |
| 18 | 0.054 | 0.0378 | 0.0318 | 17.0 B | 12.1 | 12.8 | 8.07 | 0.851 | 0.170 | 0.144 | 0.283 | 0.018 | 18 |
| 19 | 0.054 | 0.0378 | 0.0318 | 24.1 B | 10.1 | 11.8 | 8.54 | 0.934 | 0.144 | 0.150 | 0.261 | 0.017 | 19 |
| 20 | 0.0548 | 0.0348 | 0.0348 | 28.3 B | 9.80 | 10.3 | 8.13 | 0.680 | 0.133 | 0.144 | 0.283 | 0.018 | 20 |
| 21 | 0.0548 | 0.0348 | 0.0378 | 30.3 B | 9.37 | 10.3 | 3.98 | 0.538 | 0.178 | 0.125 | 0.311 | 0.015 | 21 |
| 22 | 0.0518 | 0.0348 | 0.0408 | 31.4 | 9.20 | 13.0 | 3.26 | 0.708 | 0.184 | 0.173 | 0.280 | 0.013 | 22 |
| 23 | 0.0518 | 0.0348 | 0.0428 | 32.0 | 8.78 | 17.1 | 2.81 | 1.86 | 0.187 | 0.187 | 0.255 | 0.011 | 23 |
| 24 | 0.0518 | 0.0348 | 0.0458 | 32.3 | 8.33 | 19.8 | 2.12 | 1.87 | 0.181 | 0.185 | 0.221 | 0.010 | 24 |
| 25 | 0.0518 | 0.0348 | 0.0488 | 33.1 | 8.00 | 20.7 | 1.78 | 1.78 | 0.178 | 0.249 | 0.201 | 0.009 | 25 |
| 26 | 0.0488 | 0.0348 | 0.0518 | 34.0 | 11.0 | 21.3 | 1.80 | 1.81 | 0.150 | 0.249 | 0.204 | 0.008 | 26 |
| 27 | 0.0488 | 0.0318 | 0.0718 | 34.5 | 13.7 | 21.5 | 1.27 | 1.44 | 0.170 | 0.249 | 0.204 | 0.007 | 27 |
| 28 | 0.0488 | 0.0318 | 0.0858 | 35.1 | 16.0 | 21.8 | 1.13 | 1.22 | 0.187 | 0.283 | 0.184 | 0.007 | 28 |
| 29 | 0.0488 | | 0.0898 | 35.0 | 18.4 | 21.9 | 1.02 | 1.13 | 0.153 | 0.340 | 0.158 | 0.008 | 29 |
| 30 | 0.0488 | | 0.1278 | 35.8 | 15.1 | 22.0 | 0.906 | 0.991 | 0.144 | 0.241 | 0.133 | 0.005 | 30 |
| 31 | 0.0488 | | 0.1668 | | 15.3 | | 0.793 | 0.883 | | 0.180 | | 0.004 | 31 |
| TOTAL | 1.617 | 1.075 | 1.377 | 456.785 | 700.98 | 374.80 | 388.669 | 29.138 | 10.122 | 5.529 | 7.034 | 1.805 | TOTAL |
| MEAN | 0.052 | 0.038 | 0.044 | 15.2 | 22.6 | 12.5 | 11.9 | 0.940 | 0.337 | 0.178 | 0.234 | 0.052 | MEAN |
| MAX | 0.054 | 0.045 | 0.168 | 35.8 | 37.9 | 22.0 | 22.1 | 1.87 | 0.878 | 0.340 | 0.340 | 0.147 | MAX |
| MIN | 0.048 | 0.031 | 0.028 | 0.186 | 8.33 | 5.86 | 0.793 | 0.636 | 0.133 | 0.125 | 0.118 | 0.004 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 5.37
MAXIMUM DAILY, 37.9 ON MAY 2
MINIMUM DAILY, 0.004 ON DEC 31
MAXIMUM INSTANTANEOUS,
38.1 AT 17:00 CST ON MAY 4

SUMMARY FOR THE YEAR 1969

INTERNATIONAL GAUGING STATION
TYPE OF GAUGE - RECORDING
LOCATION - LAT 46 58 54 N
LONG 68 27 45 W
DRAINAGE AREA, 4 150 km²

B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 140 | JUL | 31 800 |
| FEB | 92.8 | AUG | 2 920 |
| MAR | 118 | SEP | 875 |
| APR | 39 500 | OCT | 478 |
| MAY | 60 600 | NOV | 608 |
| JUN | 32 400 | DEC | 139 |

TOTAL DISCHARGE, 169 000 dam³

## ROSEAU RIVER NEAR DOMINION CITY - STATION NO. 05DD001

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1969

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.0818 | 0.0888 | 0.0488 | 0.0628 | 37.7 | 14.8 | 20.5 | 0.986 | 1.07 | 0.257 | 0.290 | 0.2508 | 1 |
| 2 | 0.0818 | 0.0878 | 0.0478 | 0.0748 | 38.3 | 13.5 | 20.8 | 0.856 | 0.986 | 0.263 | 0.295 | 0.2448 | 2 |
| 3 | 0.0818 | 0.0868 | 0.0468 | 0.1158 | 38.6 | 12.0 | 21.0 | 1.27 | 0.911 | 0.287 | 0.285 | 0.2618 | 3 |
| 4 | 0.0848 | 0.0818 | 0.0448 | 0.1378 | 39.0 | 10.5 | 21.0 | 1.70 | 0.848 | 0.268 | 0.282 | 0.2268 | 4 |
| 5 | 0.0888 | 0.0788 | 0.0418 | 0.1578 | 39.6 | 9.05 | 20.9 | 1.42 | 0.783 | 0.255 | 0.264 | 0.2158 | 5 |
| 6 | 0.0938 | 0.0748 | 0.0418 | 0.1748 | 39.0 | 8.04 | 20.7 | 1.26 | 0.897 | 0.258 | 0.230 | 0.2418 | 6 |
| 7 | 0.1008 | 0.0718 | 0.0388 | 0.1838 | 38.6 | 7.87 | 20.7 | 1.07 | 0.858 | 0.255 | 0.221 | 0.2188 | 7 |
| 8 | 0.1218 | 0.0768 | 0.0378 | 0.2028 | 38.6 | 7.69 | 20.8 | 0.887 | 0.812 | 0.280 | 0.225 | 0.1928 | 8 |
| 9 | 0.1328 | 0.0748 | 0.0388 | 0.2318 | 38.5 | 7.15 | 20.7 | 0.702 | 0.834 | 0.285 | 0.232 | 0.1678 | 9 |
| 10 | 0.1268 | 0.0888 | 0.0378 | 0.2878 | 37.2 | 6.83 | 20.8 | 0.894 | 0.472 | 0.306 | 0.217 | 0.1588 | 10 |
| 11 | 0.1178 | 0.0848 | 0.0388 | 0.3128 | 35.9 | 8.86 | 20.3 | 0.859 | 0.484 | 0.328 | 0.2078 | 0.1708 | 11 |
| 12 | 0.1188 | 0.0838 | 0.0438 | 0.4328 | 34.4 | 8.84 | 20.0 | 0.831 | 0.483 | 0.309 | 0.1958 | 0.1788 | 12 |
| 13 | 0.1128 | 0.0818 | 0.0448 | 0.5108 | 32.7 | 8.90 | 19.1 | 1.11 | 0.460 | 0.316 | 0.2318 | 0.1668 | 13 |
| 14 | 0.1068 | 0.0828 | 0.0488 | 5.33 B | 30.6 | 7.40 | 17.8 | 0.912 | 0.384 | 0.340 | 0.2388 | 0.1488 | 14 |
| 15 | 0.1078 | 0.0688 | 0.0488 | 5.88 B | 28.1 | 10.0 | 16.2 | 0.768 | 0.348 | 0.295 | 0.2238 | 0.1208 | 15 |
| 16 | 0.1038 | 0.0888 | 0.0488 | 11.1 B | 24.9 | 11.3 | 14.8 | 0.678 | 0.288 | 0.305 | 0.2138 | 0.1018 | 16 |
| 17 | 0.1028 | 0.0708 | 0.0438 | 11.8 B | 21.2 | 12.7 | 13.8 | 0.818 | 0.268 | 0.328 | 0.2118 | 0.0818 | 17 |
| 18 | 0.1038 | 0.0888 | 0.0408 | 14.0 B | 17.3 | 13.3 | 10.8 | 0.821 | 0.235 | 0.332 | 0.2248 | 0.0838 | 18 |
| 19 | 0.1068 | 0.0888 | 0.0378 | 19.0 B | 14.2 | 12.8 | 9.43 | 1.17 | 0.288 | 0.317 | 0.2208 | 0.0828 | 19 |
| 20 | 0.1088 | 0.0848 | 0.0358 | 25.8 B | 12.3 | 12.1 | 8.30 | 2.01 | 0.232 | 0.321 | 0.2438 | 0.0828 | 20 |
| 21 | 0.0888 | 0.0828 | 0.0288 | 26.6 B | 11.2 | 10.8 | 7.16 | 2.32 | 0.288 | 0.324 | 0.2748 | 0.0888 | 21 |
| 22 | 0.0828 | 0.0848 | 0.0288 | 37.6 B | 10.8 | 10.4 | 6.03 | 2.07 | 0.248 | 0.318 | 0.2648 | 0.0858 | 22 |
| 23 | 0.0948 | 0.0508 | 0.0288 | 41.0 | 10.1 | 12.6 | 4.87 | 1.59 | 0.271 | 0.161 | 0.2428 | 0.0868 | 23 |
| 24 | 0.0938 | 0.0468 | 0.0288 | 38.4 | 9.58 | 18.1 | 4.08 | 1.16 | 0.260 | 0.181 | 0.2318 | 0.1078 | 24 |
| 25 | 0.0878 | 0.0488 | 0.0308 | 37.6 | 8.42 | 18.3 | 3.22 | 1.23 | 0.288 | 0.186 | 0.2328 | 0.1188 | 25 |
| 26 | 0.0858 | 0.0488 | 0.0328 | 37.3 | 10.1 | 19.2 | 2.43 | 1.82 | 0.278 | 0.212 | 0.2588 | 0.1188 | 26 |
| 27 | 0.0788 | 0.0488 | 0.0328 | 37.0 | 11.8 | 18.7 | 1.88 | 1.77 | 0.268 | 0.268 | 0.2728 | 0.1068 | 27 |
| 28 | 0.0798 | 0.0488 | 0.0578 | 37.2 | 14.3 | 18.8 | 1.59 | 1.63 | 0.228 | 0.233 | 0.2868 | 0.1068 | 28 |
| 29 | 0.0798 | | 0.0728 | 37.8 | 16.6 | 20.4 | 1.41 | 1.52 | 0.238 | 0.188 | 0.2858 | 0.1278 | 29 |
| 30 | 0.0788 | | 0.0888 | 37.5 | 15.8 | 20.6 | 1.28 | 1.38 | 0.240 | 0.334 | 0.2448 | 0.1328 | 30 |
| 31 | 0.0828 | | 0.0888 | | 15.5 | | 1.16 | 1.23 | | 0.310 | | 0.1288 | 31 |
| TOTAL | 3.013 | 1.801 | 1.323 | 467.058 | 773.61 | 388.82 | 391.80 | 36.223 | 13.638 | 8.868 | 7.208 | 4.847 | TOTAL |
| MEAN | 0.097 | 0.064 | 0.043 | 15.6 | 25.0 | 13.2 | 12.6 | 1.33 | 0.451 | 0.276 | 0.240 | 0.147 | MEAN |
| MAX | 0.132 | 0.087 | 0.073 | 41.0 | 38.6 | 20.6 | 21.0 | 2.32 | 1.07 | 0.340 | 0.295 | 0.284 | MAX |
| MIN | 0.078 | 0.046 | 0.028 | 0.062 | 8.42 | 8.83 | 1.16 | 0.818 | 0.228 | 0.141 | 0.185 | 0.052 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 5.58
MAXIMUM DAILY, 41.0 ON APR 23
MINIMUM DAILY, 0.0288 ON MAR 21
MAXIMUM INSTANTANEOUS,
43.4 AT 20:10 CST ON APR 22

SUMMARY FOR THE YEAR 1969

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 11 53 N
LONG 97 03 15 W
DRAINAGE AREA, 6 260 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 280 | JUL | 33 900 |
| FEB | 188 | AUG | 3 300 |
| MAR | 116 | SEP | 1 170 |
| APR | 40 400 | OCT | 735 |
| MAY | 88 600 | NOV | 823 |
| JUN | 31 900 | DEC | 383 |

TOTAL DISCHARGE, 178 000 dam³

## ROSSISLE CREEK NEAR ROSSISLE - STATION NO. 05DF005

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.238 | 0.020 | 0.005 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.188 | 0.018 | 0.004 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0.184 | 0.017 | 0.004 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 0.143 | 0.015 | 0.003 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0.1208 | 0.127 | 0.012 | 0.003 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0.2408 | 0.114 | 0.012 | 0.003 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.4188 | 0.104 | 0.010 | 0.002 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.2338 | 0.100 | 0.013 | 0.002 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.0848 | 0.083 | 0.011 | 0.002 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.0688 | 0.088 | 0.008 | 0.002 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.0508 | 0.078 | 0.008 | 0.001 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.1348 | 0.068 | 0.008 | 0.001 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 1.06 B | 0.058 | 0.021 | 0.001 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 4.49 B | 0.058 | 0.046 | 0.001 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 4.47 B | 0.054 | 0.031 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 8.04 B | 0.081 | 0.018 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 1.65 B | 0.049 | 0.013 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 1.17 B | 0.051 | 0.010 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 2.45 B | 0.048 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 2.81 | 0.048 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 2.20 | 0.043 | 0.007 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 2.14 | 0.038 | 0.007 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 2.47 | 0.033 | 0.007 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 1.68 | 0.034 | 0.007 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 1.26 | 0.031 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.812 | 0.031 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.580 | 0.027 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.410 | 0.025 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.333 | 0.024 | 0.006 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.274 | 0.023 | 0.006 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0.022 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 37.713 | 3.282 | 0.378 | 0.034 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 1.26 | 0.073 | 0.013 | 0.001 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 8.04 | 0.238 | 0.046 | 0.005 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0.022 | 0.006 | 0 | 0 | 0 | 0 | --- | --- | MIN |

SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.185
MAXIMUM DAILY, 8.048 ON APR 16
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
8.24 AT 05:15 CST ON APR 16

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 30 10 N
LONG 98 19 40 W
DRAINAGE AREA, 308 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 3.84 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 3 260 | OCT | 0 |
| MAY | 195 | NOV | --- |
| JUN | 32.5 | DEC | --- |

TOTAL DISCHARGE, 3 480 dam³

## ROUND LAKE AT OUTLET - STATION NO. 05RD011

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | 0.602 | 0.585 | 0.508 | 0.548 | 0.818 | 1.818 | 1.678 | 1.480 | 1.238 | 1.080 | --- | 1 |
| 2 | --- | 0.596 | 0.583 | 0.500 | 0.542 | 0.810 | 1.832 | 1.663 | 1.478 | 1.230 | 1.040 | --- | 2 |
| 3 | --- | 0.594 | 0.583 | 0.496 | 0.534 | 0.888 | 1.841 | 1.730 | 1.486 | 1.223 | 1.034 | --- | 3 |
| 4 | --- | 0.578 | 0.576 | 0.495 | 0.538 | 0.888 | 1.848 | 1.738 | 1.480 | 1.218 | 1.031 | --- | 4 |
| 5 | --- | 0.580 | 0.573 | 0.493 | 0.534 | 0.888 | 1.857 | 1.740 | 1.488 | 1.215 | 1.031 | --- | 5 |
| 6 | --- | 0.584 | 0.585 | 0.491 | 0.541 | 0.888 | 1.885 | 1.732 | 1.441 | 1.218 | 1.030 | --- | 6 |
| 7 | --- | 0.587 | 0.570 | 0.488 | 0.538 | 0.878 | 1.871 | 1.728 | 1.438 | 1.212 | 1.028 | --- | 7 |
| 8 | --- | 0.590 | 0.572 | 0.483 | 0.536 | 0.875 | 1.887 | 1.731 | 1.433 | 1.208 | 1.025 | --- | 8 |
| 9 | --- | 0.601 | 0.572 | 0.478 | 0.536 | 0.878 | 1.704 | 1.715 | 1.438 | 1.207 | 1.026 | --- | 9 |
| 10 | --- | 0.602 | 0.576 | 0.476 | 0.533 | 0.878 | 1.713 | 1.703 | 1.438 | 1.201 | 1.023 | --- | 10 |
| 11 | 0.588A | 0.601 | 0.578 | 0.470 | 0.538 | 0.878 | 1.717 | 1.888 | 1.438 | 1.180 | 1.023 | --- | 11 |
| 12 | --- | 0.598 | 0.582 | 0.488 | 0.548 | 0.818 | 1.724 | 1.874 | 1.430 | 1.181 | 1.020 | --- | 12 |
| 13 | --- | 0.600 | 0.581 | 0.484 | 0.540 | 0.883 | 1.734 | 1.887 | 1.424 | 1.170 | 1.020 | --- | 13 |
| 14 | --- | 0.604 | 0.573 | 0.481 | 0.524 | 1.024 | 1.738 | 1.888 | 1.417 | 1.181 | 1.011 | --- | 14 |
| 15 | --- | 0.608 | 0.588 | 0.480 | 0.513 | 1.038 | 1.737 | 1.844 | 1.410 | 1.184 | 1.007 | --- | 15 |
| 16 | --- | 0.598 | 0.588 | 0.480 | 0.508 | 1.057 | 1.743 | 1.833 | 1.388 | 1.167 | 1.008 | --- | 16 |
| 17 | --- | 0.591 | 0.844 | 0.481 | 0.503 | 1.078 | 1.752 | 1.828 | 1.387 | 1.138 | 1.003 | --- | 17 |
| 18 | --- | 0.585 | 0.838 | 0.488 | 0.520 | 1.103 | 1.761 | 1.811 | 1.377 | 1.134 | 0.988 | --- | 18 |
| 19 | --- | 0.844 | 0.829 | 0.486 | 0.538 | 1.132 | 1.743 | 1.821 | 1.387 | 1.133 | 0.985 | --- | 19 |
| 20 | --- | 0.578 | 0.828 | 0.488 | 0.581 | 1.138 | 1.738 | 1.840 | 1.384 | 1.118 | 0.985 | --- | 20 |
| 21 | --- | 0.578 | 0.824 | 0.480 | 0.843 | 1.158 | 1.732 | 1.822 | 1.381 | 1.104 | 0.888 | --- | 21 |
| 22 | --- | 0.576 | 0.823 | 0.480 | 0.663 | 1.178 | 1.726 | 1.820 | 1.338 | 1.095 | 0.881 | --- | 22 |
| 23 | --- | 0.580 | 0.814 | 0.514 | 0.654 | 1.204 | 1.719 | 1.810 | 1.335 | 1.085 | 0.874 | --- | 23 |
| 24 | --- | 0.581 | 0.818 | 0.541 | 0.855 | 1.248 | 1.718 | 1.800 | 1.318 | 1.078 | 0.870 | --- | 24 |
| 25 | --- | 0.582 | 0.822 | 0.588 | 0.709 | 1.288 | 1.709 | 1.891 | 1.308 | 1.070 | 0.888 | --- | 25 |
| 26 | --- | 0.585 | 0.828 | 0.663 | 0.831 | 1.387 | 1.887 | 1.872 | 1.288 | 1.063 | 0.988 | --- | 26 |
| 27 | --- | 0.588 | 0.830 | 0.862 | 0.874 | 1.508 | 1.884 | 1.884 | 1.285 | 1.084 | 0.981A | --- | 27 |
| 28 | 0.588A | 0.597 | 0.828 | 0.880 | 0.887 | 1.584 | 1.878 | 1.835 | 1.278 | 1.083 | --- | --- | 28 |
| 29 | 0.600 | | 0.825 | 0.858 | 0.888 | 1.577 | 1.874 | 1.828 | 1.280 | 1.083 | --- | --- | 29 |
| 30 | 0.603 | | 0.818 | 0.888 | 0.910 | 1.800 | 1.881 | 1.813 | 1.248 | 1.083 | --- | --- | 30 |
| 31 | 0.603 | | 0.810 | | 0.917 | | 1.881 | 1.488 | | 1.087 | | --- | 31 |
| MEAN | --- | 0.590 | 0.881 | 0.488 | 0.834 | 1.088 | 1.700 | 1.841 | 1.384 | 1.148 | --- | --- | MEAN |
| MAX | --- | 0.608 | 0.588 | 0.883 | 0.917 | 1.800 | 1.762 | 1.740 | 1.480 | 1.238 | --- | --- | MAX |
| MIN | --- | 0.578 | 0.810 | 0.488 | 0.503 | 0.878 | 1.818 | 1.488 | 1.248 | 1.087 | --- | --- | MIN |

SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MAXIMUM DAILY, 1.762 ON JUL 17
MINIMUM DAILY, 0.488 ON APR 18
MAXIMUM INSTANTANEOUS,
1.766 AT 23:59 CST ON JUL 17

WATER LEVELS ARE REFERRED TO ASSUMED DATUM

TYPE OF GAUGE - RECORDING
LOCATION - LAT 52 01 40 N
LONG 98 23 20 W

A - MANUAL GAUGE

NATURAL FLOW

## RUSSELL LAKE NEAR MERRIDY - STATION NO. 05EB005

### DAILY WATER LEVEL IN METRES FOR 1969

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 323.886 | 323.521 | 323.406 | 323.377 | 323.237 | 323.736 | 324.083 | 324.171 | 324.133 | 324.007 | 323.888 | 323.804 | 1 |
| 2 | 323.867 | 323.518 | 323.399 | 323.373 | 323.250 | 323.784 | 324.074 | 324.184 | 324.132 | 324.033 | 323.884 | 323.803 | 2 |
| 3 | 323.859 | 323.512 | 323.387 | 323.368 | 323.270 | 323.788 | 324.078 | 324.148 | 324.127 | 324.022 | 323.877 | 323.804 | 3 |
| 4 | 323.847 | 323.511 | 323.382 | 323.363 | 323.285 | 323.785 | 324.106 | 324.135 | 324.127 | 324.018 | 323.878 | 323.807 | 4 |
| 5 | 323.849 | 323.511 | 323.366 | 323.362 | 323.301 | 323.776 | 324.106 | 324.154 | 324.122 | 324.004 | 323.873 | 323.795 | 5 |
| 6 | 323.840 | 323.508 | 323.372 | 323.358 | 323.321 | 323.776 | 324.128 | 324.157 | 324.122 | 323.994 | 323.872 | 323.788 | 6 |
| 7 | 323.828 | 323.497 | 323.377 | 323.351 | 323.336 | 323.783 | 324.134 | 324.158 | 324.128 | 323.992 | 323.871 | 323.782 | 7 |
| 8 | 323.824 | 323.494 | 323.378 | 323.346 | 323.358 | 323.809 | 324.134 | 324.158 | 324.126 | 323.982 | 323.888 | 323.777 | 8 |
| 9 | 323.817 | 323.493 | 323.378 | 323.342 | 323.372 | 323.798 | 324.132 | 324.157 | 324.124 | 323.963 | 323.885 | 323.773 | 9 |
| 10 | 323.811 | 323.492 | 323.366 | 323.336 | 323.383 | 323.795 | 324.138 | 324.153 | 324.117 | 323.880 | 323.886 | 323.771 | 10 |
| 11 | 323.812 | 323.488 | 323.359 | 323.334 | 323.418 | 323.810 | 324.148 | 324.153 | 324.128 | 323.883 | 323.877 | 323.784 | 11 |
| 12 | 323.806 | 323.484 | 323.361 | 323.331 | 323.433 | 323.824 | 324.153 | 324.128 | 324.136 | 323.886 | 323.888 | 323.786 | 12 |
| 13 | 323.807 | 323.481 | 323.356 | 323.328 | 323.444 | 323.841 | 324.156 | 324.142 | 324.134 | 323.880 | 323.880 | 323.783 | 13 |
| 14 | 323.806 | 323.472 | 323.351 | 323.326 | 323.459 | 323.852 | 324.157 | 324.144 | 324.127 | 323.854 | 323.884 | 323.748 | 14 |
| 15 | 323.868 | 323.468 | 323.347 | 323.318 | 323.476 | 323.862 | 324.158 | 324.138 | 324.122 | 323.851 | 323.851 | 323.747 | 15 |
| 16 | 323.883 | 323.462 | 323.344 | 323.317 | 323.488 | 323.859 | 324.185 | 324.138 | 324.121 | 323.854 | 323.844 | 323.748 | 16 |
| 17 | 323.876 | 323.460 | 323.338 | 323.312 | 323.495 | 323.852 | 324.185 | 324.130 | 324.113 | 323.851 | 323.843 | 323.738 | 17 |
| 18 | 323.881 | 323.458 | 323.330 | 323.310 | 323.515 | 323.878 | 324.188 | 324.108 | 324.108 | 323.858 | 323.838 | 323.732 | 18 |
| 19 | 323.874 | 323.453 | 323.328 | 323.300 | 323.508 | 323.862 | 324.175 | 324.113 | 324.098 | 323.837 | 323.842 | 323.730 | 19 |
| 20 | 323.867 | 323.448 | 323.323 | 323.184 | 323.533 | 323.813 | 324.173 | 324.136 | 324.088 | 323.836 | 323.843 | 323.727 | 20 |
| 21 | 323.870 | 323.441 | 323.317 | 323.180 | 323.567 | 323.806 | 324.174 | 324.113 | 324.084 | 323.821 | 323.837 | 323.718 | 21 |
| 22 | 323.867 | 323.437 | 323.313 | 323.185 | 323.587 | 323.806 | 324.182 | 324.101 | 324.081 | 323.813 | 323.830 | 323.713 | 22 |
| 23 | 323.882 | 323.432 | 323.312 | 323.220 | 323.603 | 323.810 | 324.184 | 324.117 | 324.094 | 323.815 | 323.821 | 322.712 | 23 |
| 24 | 323.864 | 323.428 | 323.306 | 323.230 | 323.620 | 323.813 | 324.183 | 324.128 | 324.072 | 323.802 | 323.812 | 323.708 | 24 |
| 25 | 323.865 | 323.421 | 323.297 | 323.228 | 323.628 | 323.828 | 324.189 | 324.134 | 324.080 | 323.809 | 323.812 | 323.703 | 25 |
| 26 | 323.864 | 323.417 | 323.295 | 323.222 | 323.651 | 323.838 | 324.158 | 324.137 | 324.088 | 323.887 | 323.812 | 323.888 | 26 |
| 27 | 323.864 | 323.414 | 323.294 | 323.223 | 323.660 | 323.871 | 324.177 | 324.144 | 324.052 | 323.858 | 323.808 | 323.887 | 27 |
| 28 | 323.845 | 323.411 | 323.286 | 323.222 | 323.687 | 323.884 | 324.178 | 324.138 | 324.037 | 323.804 | 323.788 | 323.883 | 28 |
| 29 | 323.845 | | 323.283 | 323.227 | 323.708 | 324.021 | 324.176 | 324.135 | 324.026 | 323.812 | 323.804 | 323.881 | 29 |
| 30 | 323.836 | | 323.283 | 323.230 | 323.717 | 324.030 | 324.173 | 324.136 | 324.006 | 323.806 | 323.788 | 323.887 | 30 |
| 31 | 323.830 | | 323.281 | | 323.737 | | 324.189 | 324.134 | | 323.868 | | 323.891 | 31 |
| MEAN | 323.892 | 323.489 | 323.341 | 323.231 | 323.486 | 323.862 | 324.148 | 324.139 | 324.100 | 323.951 | 323.848 | 323.744 | MEAN |
| MAX | 323.886 | 323.521 | 323.406 | 323.377 | 323.737 | 324.030 | 324.184 | 324.171 | 324.133 | 324.033 | 323.888 | 323.808 | MAX |
| MIN | 323.830 | 323.411 | 323.281 | 323.180 | 323.237 | 323.736 | 324.052 | 324.101 | 324.006 | 323.836 | 323.788 | 323.691 | MIN |

### SUMMARY FOR THE YEAR 1969

WATER LEVELS IN METRES

MEAN, 323.744
MAXIMUM DAILY, 324.184 ON JUL 23
MINIMUM DAILY, 323.180 ON APR 21
MAXIMUM INSTANTANEOUS,
324.219 AT 11:43 CST ON JUL 23

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 20 24 N
LONG 101 21 48 W

REGULATED

DRAINAGE AREA,
1 050 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (MAN. HYDRO EXT.)

## RUSSELL RESERVOIR NEAR RUSSELL - STATION NO. 05MB003

### DAILY WATER LEVEL IN METRES FOR 1969

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 880.407 | 880.343 | 880.328 | 880.207 | 880.122 | 880.033 | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 880.406 | 880.338 | 880.322 | 880.206 | 880.118 | 880.028 | --- | --- | 2 |
| 3 | --- | --- | --- | 848.847A | 880.404 | 880.338 | 880.312 | 880.199 | 880.117 | 880.025 | --- | --- | 3 |
| 4 | --- | --- | --- | 880.007 | 880.404 | 880.333 | 880.305 | 880.188 | 880.118 | 880.024 | --- | --- | 4 |
| 5 | --- | --- | --- | 880.020 | 880.398 | 880.333 | 880.300 | 880.176 | 880.118 | 880.027 | --- | --- | 5 |
| 6 | --- | --- | --- | 880.033 | 880.396 | 880.335 | 880.294 | 880.171 | 880.118 | 880.029 | --- | --- | 6 |
| 7 | --- | --- | --- | 880.121 | 880.394 | 880.350 | 880.290 | 880.168 | 880.118 | 880.029 | --- | --- | 7 |
| 8 | --- | --- | --- | 880.207 | 880.394 | 880.348 | 880.283 | 880.163 | 880.112 | 880.027 | --- | --- | 8 |
| 9 | --- | --- | --- | 880.260 | 880.383 | 880.343 | 880.303 | 880.158 | 880.107 | 880.026 | --- | --- | 9 |
| 10 | --- | --- | --- | 880.286 | 880.380 | 880.340 | 880.300 | 880.154 | 880.104 | 880.024 | --- | --- | 10 |
| 11 | --- | --- | --- | 880.323 | 880.386 | 880.345 | 880.302 | 880.149 | 880.100 | 880.022 | --- | --- | 11 |
| 12 | --- | --- | --- | 880.347 | 880.381 | 880.368 | 880.300 | 880.141 | 880.098 | 880.020 | --- | 880.012A | 12 |
| 13 | --- | --- | 848.878A | 880.367A | 880.376 | 880.370 | 880.298 | 880.134 | 880.092 | 880.018 | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 880.370 | 880.368 | 880.292 | 880.128 | 880.088 | 880.017 | --- | --- | 14 |
| 15 | --- | --- | 848.874A | --- | 880.368 | 880.368 | 880.288 | 880.128 | 880.088 | 880.016 | --- | --- | 15 |
| 16 | --- | --- | --- | --- | 880.368 | 880.385 | 880.284 | 880.118 | 880.082 | 880.014 | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 880.368 | 880.381 | 880.278 | 880.118 | 880.081 | 880.013 | --- | --- | 17 |
| 18 | --- | --- | --- | --- | 880.364 | 880.368 | 880.274 | 880.120 | 880.080 | 880.011 | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 880.361 | 880.368 | 880.270 | 880.118 | 880.080 | 880.009 | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 880.354 | 880.354 | 880.268E | 880.110 | 880.077 | 880.008 | --- | --- | 20 |
| 21 | --- | --- | --- | 880.412A | 880.350 | 880.350 | 880.260E | 880.108 | 880.072 | 880.007 | --- | --- | 21 |
| 22 | --- | --- | --- | 880.408 | 880.342 | 880.348 | 880.264E | 880.103 | 880.085 | 880.007 | 880.018A | --- | 22 |
| 23 | --- | --- | --- | 880.418 | 880.341 | 880.347 | 880.248E | 880.088 | 880.058 | 880.008 | --- | --- | 23 |
| 24 | --- | --- | --- | 880.418 | 880.348 | 880.342 | 880.244E | 880.086 | 880.053 | 880.008 | --- | --- | 24 |
| 25 | --- | --- | --- | 880.421 | 880.363 | 880.337 | 880.238 | 880.104 | 880.060 | 880.004 | --- | --- | 25 |
| 26 | --- | --- | --- | 880.420 | 880.363 | 880.341 | 880.232E | 880.088 | 880.048 | 880.004E | --- | --- | 26 |
| 27 | --- | --- | --- | 880.416 | 880.363 | 880.340 | 880.228 | 880.083 | 880.048 | 880.005E | --- | --- | 27 |
| 28 | --- | --- | --- | 880.412 | 880.358 | 880.337 | 880.220 | 880.106 | 880.043 | 880.005E | --- | --- | 28 |
| 29 | --- | --- | --- | 880.408 | 880.352 | 880.334 | 880.218 | 880.132 | 880.038 | 880.005E | --- | --- | 29 |
| 30 | --- | --- | --- | 880.407 | 880.348 | 880.331 | 880.218E | 880.128 | 880.036 | 880.005E | --- | --- | 30 |
| 31 | --- | --- | --- | | 880.348 | | 880.211 | 880.126 | | 880.006A | | --- | 31 |
| MEAN | --- | --- | --- | --- | 880.371 | 880.347 | 880.273 | 880.137 | 880.084 | 880.015 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 880.407 | 880.370 | 880.328 | 880.207 | 880.122 | 880.033 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 880.341 | 880.331 | 880.211 | 880.083 | 880.036 | 880.004 | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1969

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 47 50 N
LONG 101 15 58 W

DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

A - MANUAL GAUGE

E - ESTIMATED

REGULATED SINCE 1964

DRAINAGE AREA,
88.1 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## SASKATCHEWAN RIVER AT GRAND RAPIDS - STATION NO. 05KL001

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 184 | 1 080 | 1 220 | 818 | 207 | 181 | 177 | 288 | 288 | 187 | 283 | 1 010 | 1 |
| 2 | 202 | 1 070 | 1 210 | 823 | 180 | 184 | 138 | 304 | 218 | 238 | 278 | 1 090 | 2 |
| 3 | 148 | 1 170 | 1 180 | 838 | 178 | 178 | 187 | 301 | 187 | 198 | 458 | 1 110 | 3 |
| 4 | 178 | 1 180 | 1 180 | 347 | 183 | 202 | 188 | 298 | 178 | 418 | 228 | 881 | 4 |
| 5 | 188 | 1 120 | 1 180 | 338 | 237 | 188 | 417 | 178 | 223 | 717 | 268 | 188 | 5 |
| 6 | 200 | 1 180 | 1 120 | 318 | 202 | 141 | 384 | 188 | 812 | 838 | 284 | 248 | 6 |
| 7 | 178 | 1 180 | 883 | 340 | 185 | 148 | 428 | 188 | 488 | 784 | 220 | 483 | 7 |
| 8 | 184 | 1 080 | 711 | 308 | 180 | 184 | 178 | 288 | 332 | 838 | 288 | 378 | 8 |
| 9 | 881 | 1 120 | 838 | 318 | 184 | 178 | 352 | 188 | 180 | 811 | 280 | 278 | 9 |
| 10 | 838 | 1 180 | 388 | 332 | 212 | 211 | 482 | 201 | 188 | 840 | 287 | 270 | 10 |
| 11 | 881 | 848 | 810 | 301 | 281 | 181 | 381 | 281 | 184 | 847 | 181 | 484 | 11 |
| 12 | 383 | 308 | 883 | 283 | 242 | 184 | 228 | 188 | 181 | 438 | 188 | 823 | 12 |
| 13 | 178 | 681 | 783 | 257 | 122 | 187 | 188 | 178 | 177 | 814 | 248 | 738 | 13 |
| 14 | 182 | 737 | 788 | 308 | 113 | 138 | 188 | 201 | 188 | 888 | 208 | 888 | 14 |
| 15 | 141 | 1 080 | 781 | 241 | 182 | 180 | 188 | 141 | 178 | 841 | 788 | 484 | 15 |
| 16 | 180 | 1 180 | 784 | 247 | 182 | 181 | 211 | 88.0 | 218 | 388 | 1 230 | 278 | 16 |
| 17 | 180 | 1 130 | 774 | 280 | 187 | 180 | 218 | 88.0 | 188 | 482 | 1 180 | 288 | 17 |
| 18 | 188 | 1 140 | 881 | 213 | 188 | 182 | 218 | 87.0 | 801 | 317 | 1 130 | 874 | 18 |
| 19 | 218 | 808 | 800 | 284 | 141 | 287 | 218 | 88.0 | 218 | 244 | 778 | 884 | 19 |
| 20 | 281 | 1 180 | 802 | 182 | 118 | 188 | 838 | 88.0 | 208 | 280 | 883 | 849 | 20 |
| 21 | 178 | 1 038 | 811 | 241 | 183 | 187 | 387 | 208 | 181 | 237 | 387 | 1 180 | 21 |
| 22 | 188 | 1 180 | 788 | 247 | 188 | 183 | 234 | 444 | 218 | 284 | 288 | 1 128 | 22 |
| 23 | 188 | 878 | 738 | 242 | 187 | 188 | 187 | 328 | 183 | 218 | 438 | 834 | 23 |
| 24 | 181 | 788 | 708 | 238 | 184 | 180 | 232 | 313 | 188 | 238 | 843 | 388 | 24 |
| 25 | 183 | 838 | 888 | 188 | 180 | 148 | 237 | 234 | 218 | 228 | 778 | 881 | 25 |
| 26 | 188 | 888 | 418 | 218 | 188 | 208 | 238 | 232 | 284 | 237 | 388 | 488 | 28 |
| 27 | 338 | 1 078 | 478 | 248 | 183 | 187 | 188 | 208 | 217 | 177 | 888 | 338 | 27 |
| 28 | 188 | 1 080 | 384 | 288 | 188 | 181 | 188 | 231 | 181 | 288 | 1 038 | 288 | 28 |
| 29 | 188 | | 418 | 287 | 178 | 187 | 187 | 188 | 178 | 228 | 1 038 | 238 | 29 |
| 30 | 178 | | 847 | 188 | 171 | 137 | 182 | 188 | 188 | 382 | 878 | 228 | 30 |
| 31 | 878 | | 838 | | 188 | | 338 | 188 | | 382 | | 212 | 31 |
| TOTAL | 8 838 | 28 037 | 23 844 | 8 881 | 8 484 | 8 108 | 7 832 | 8 428.0 | 7 188 | 13 878 | 18 033 | 18 032 | TOTAL |
| MEAN | 278 | 1 000 | 788 | 288 | 177 | 170 | 282 | 287 | 237 | 438 | 584 | 582 | MEAN |
| MAX | 881 | 1 180 | 1 220 | 838 | 281 | 287 | 838 | 444 | 801 | 838 | 1 230 | 1 180 | MAX |
| MIN | 141 | 308 | 394 | 188 | 183 | 137 | 138 | 88.0 | 188 | 187 | 181 | 188 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 407
MAXIMUM DAILY, 1 230 ON NOV 16
MINIMUM DAILY, 88.0 ON AUG 18

DATA CONTRIBUTED BY -
MANITOBA HYDRO

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - POWER PLANT
LOCATION - LAT 53 08 50 N
LONG 99 20 58 W
DRAINAGE AREA, 384 000 km²

REGULATED SINCE 1964

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 748 000 | JUL | 878 000 |
| FEB | 2 420 000 | AUG | 885 000 |
| MAR | 2 030 000 | SEP | 814 000 |
| APR | 780 000 | OCT | 1 170 000 |
| MAY | 478 000 | NOV | 1 380 000 |
| JUN | 441 000 | DEC | 1 880 000 |

TOTAL DISCHARGE, 13 800 000 dam³

## SASKATCHEWAN RIVER AT THE PAS - STATION NO. 05KJ001

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1718 | --- | 3058 | 1888 | 778 | 478 | 381 | 334 | 843 | 838 | 331 | 3128 | 1 |
| 2 | 1708 | --- | 3008 | 1788 | 713 | 488 | 388 | 357 | 883 | 808 | 304 | 2138 | 2 |
| 3 | 1678 | --- | 2988 | 1778 | 702 | 808 | 378 | 412 | 880 | 428 | 2888 | 1988 | 3 |
| 4 | 1808 | --- | 2898 | 1748 | 872 | 820 | 347 | 438 | 871 | 388 | 2858 | 1888 | 4 |
| 5 | 1838 | --- | 3028 | 1778 | 881 | 821 | 388 | 477 | 844 | 384 | 2818 | 1978 | 5 |
| 6 | 1808 | --- | 3038 | 1788 | 848 | 813 | 388 | 478 | 844 | 388 | 2848 | 2188 | 6 |
| 7 | 1848 | --- | 3018 | 1808 | 818 | 817 | 374 | 427 | 888 | 382 | 2778 | 2208 | 7 |
| 8 | 1808 | --- | 2948 | 1818 | 801 | 838 | 377 | 388 | 818 | 408 | 2718 | 2388 | 8 |
| 9 | 1708 | --- | 3818 | 1828 | 878 | 828 | 413 | 388 | 818 | 431 | 2648 | 2318 | 9 |
| 10 | 1788 | --- | 2748 | 1928 | 873 | 803 | 438 | 388 | 807 | 408 | 2578 | 2388 | 10 |
| 11 | 1818 | --- | 2628 | 2018 | 888 | 477 | 407 | 418 | 881 | 374 | 2508 | 2588 | 11 |
| 12 | 1838 | --- | 2618 | 2128 | 898 | 433 | 383 | 482 | 880 | 381 | 2428 | 2678 | 12 |
| 13 | --- | --- | 2538 | 2208 | 888 | 422 | 388 | 488 | 838 | 388 | 2348 | 2488 | 13 |
| 14 | --- | --- | 2488 | 2288 | 898 | 382 | 378 | 474 | 888 | 378 | 2278 | 2828 | 14 |
| 15 | --- | --- | 2388 | 2408 | 841 | 388 | 348 | 413 | 824 | 382 | 2188 | 2888 | 15 |
| 16 | --- | --- | 2488 | 2828 | 808 | 382 | 332 | 392 | 808 | 388 | 2128 | 2788 | 16 |
| 17 | --- | --- | 2838 | 2888 | 818 | 378 | 311 | 421 | 814 | 381 | 2088 | 2848 | 17 |
| 18 | --- | --- | 2418 | 2888 | 812 | 381 | 348 | 448 | 814 | 388 | 1988 | 2928 | 18 |
| 19 | --- | --- | 2388 | 3048 | 813 | 388 | 378 | 474 | 887 | 341 | 2018 | 3008 | 18 |
| 20 | --- | --- | 2388 | 3348 | 818 | 327 | 388 | 500 | 880 | 341 | 2078 | 3118 | 20 |
| 21 | --- | --- | 3278 | 3888 | 808 | 387 | 412 | 472 | 871 | 378 | 2188 | 3288 | 21 |
| 22 | --- | --- | 3128 | 4018 | 448 | 384 | 438 | 478 | 888 | 383 | 2288 | 3348 | 22 |
| 23 | --- | 2878 | 2048 | 4448 | 423 | 384 | 448 | 512 | 888 | 383 | 2218 | 3328 | 23 |
| 24 | --- | 2888 | 1978 | 4888 | 438 | 381 | 432 | 548 | 888 | 383 | 2108 | 3288 | 24 |
| 28 | --- | 2938 | 1808 | 8448 | 488 | 388 | 438 | 843 | 818 | 387 | 1988 | 3438 | 28 |
| 26 | --- | 2918 | 1878 | 8808 | 832 | 342 | 432 | 582 | 804 | 317 | 1928 | 3288 | 28 |
| 27 | --- | 2888 | 1888 | 7888 | 812 | 388 | 448 | 538 | 801 | 388 | 1818 | 2978 | 27 |
| 28 | --- | 2888 | 1838 | 8058 | 488 | 331 | 448 | 488 | 483 | 408 | 1828 | 2888 | 28 |
| 28 | --- | | 1828 | 8748 | 488 | 324 | 411 | 518 | 488 | 383 | 1928 | 2438 | 28 |
| 30 | --- | | 1888 | 843 | 488 | 338 | 378 | 548 | 824 | 318 | 1988 | 2288 | 30 |
| 31 | --- | | 1928 | | 488 | | 348 | 544 | | 321 | | 2378 | 31 |
| TOTAL | --- | --- | 7 878 | 10 878 | 17 287 | 12 171 | 12 078 | 14 288 | 17 001 | 11 883 | 7 184 | 8 137 | TOTAL |
| MEAN | --- | --- | 344 | 388 | 888 | 406 | 388 | 481 | 887 | 383 | 237 | 282 | MEAN |
| MAX | --- | --- | 3858 | 8858 | 778 | 838 | 448 | 882 | 824 | 838 | 331 | 343 | MAX |
| MIN | --- | --- | 182 | 178 | 433 | 388 | 311 | 334 | 483 | 318 | 181 | 188 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MAXIMUM DAILY, 8058 ON APR 28

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 53 50 30 N
LONG 101 11 10 W
DRAINAGE AREA, 347 000 km²

B - ICE CONDITIONS

REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 1 040 000 |
| FEB | --- | AUG | 1 230 000 |
| MAR | 885 000 | SEP | 1 470 000 |
| APR | 932 000 | OCT | 920 000 |
| MAY | 1 480 000 | NOV | 814 000 |
| JUN | 1 080 000 | DEC | 703 000 |

## SCHIST LAKE NEAR CHANNING - STATION NO. 05KE004

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 281.834 | 281.687 | 281.785 | 281.688 | 281.670 | 281.832 | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 281.833 | 281.686 | 281.786 | 281.688 | 281.671 | 281.836 | --- | --- | 2 |
| 3 | --- | --- | --- | --- | 281.832 | 281.691 | 281.782 | 281.685 | 281.674 | 281.833 | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 281.836 | 281.690 | 281.788 | 281.688 | 281.672 | 281.833 | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 281.837 | 281.689 | 281.788 | 281.689 | 281.672 | 281.818 | --- | --- | 5 |
| 6 | --- | --- | --- | --- | 281.838 | 281.688 | 281.788 | 281.684 | 281.686 | 281.818 | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 281.838 | 281.688 | 281.785 | 281.680 | 281.671 | 281.818 | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 281.840 | 281.688 | 281.785 | 281.677 | 281.677 | 281.818 | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 281.847 | 281.685 | 281.782 | 281.675 | 281.678 | 281.811 | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 281.883 | 281.681 | 281.784 | 281.673 | 281.681 | 281.814 | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 281.888 | 281.673 | 281.765 | 281.672 | 281.683 | 281.818 | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 281.886 | 281.686 | 281.784 | 281.682 | 281.686 | 281.814 | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 281.846 | 281.688 | 281.782 | 281.680 | 281.677 | 281.817 | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 281.853 | 281.687 | 281.780 | 281.686 | 281.678 | 281.818 | --- | --- | 14 |
| 15 | --- | --- | 281.733A | --- | 281.858 | 281.671 | 281.749 | 281.667 | 281.673 | 281.817 | --- | --- | 15 |
| 16 | --- | --- | --- | --- | 281.858 | 281.685 | 281.748 | 281.686 | 281.678 | 281.817 | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 281.856 | 281.682 | 281.745 | 281.683 | 281.671 | 281.817 | --- | --- | 17 |
| 18 | --- | --- | --- | 281.647A | 281.872 | 281.686 | 281.743 | 281.645 | 281.688 | 281.823 | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 281.881 | 281.688 | 281.741 | 281.637 | 281.688 | 281.817 | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 281.700 | 281.687 | 281.738 | 281.640 | 281.687 | 281.818 | --- | --- | 20 |
| 21 | --- | --- | --- | --- | 281.707 | 281.659 | 281.742 | 281.635 | 281.688 | 281.818 | --- | --- | 21 |
| 22 | --- | --- | --- | --- | 281.703 | 281.682 | 281.733 | 281.632 | 281.656 | 281.814 | --- | --- | 22 |
| 23 | --- | --- | --- | --- | 281.707 | 281.681 | 281.726 | 281.638 | 281.683 | 281.812 | --- | --- | 23 |
| 24 | --- | --- | --- | --- | 281.711 | 281.687 | 281.723 | 281.638 | 281.648 | 281.811 | --- | --- | 24 |
| 25 | --- | --- | --- | --- | 281.704 | 281.684 | 281.718 | 281.648 | 281.647 | 281.812 | --- | --- | 25 |
| 26 | --- | --- | --- | 281.634A | 281.712 | 281.688 | 281.699 | 281.672 | 281.683 | 281.808 | --- | --- | 26 |
| 27 | --- | --- | --- | 281.633 | 281.706 | 281.715 | 281.702 | 281.681 | 281.648 | 281.804 | --- | --- | 27 |
| 28 | --- | --- | --- | 281.634 | 281.706 | 281.727 | 281.698 | 281.679 | 281.638 | 281.821 | --- | --- | 28 |
| 29 | --- | | --- | 281.633 | 281.709 | 281.738 | 281.695 | 281.674 | 281.642 | 281.820 | --- | --- | 29 |
| 30 | --- | | --- | 281.634 | 281.702 | 281.748 | 281.690 | 281.672 | 281.638 | 281.823A | --- | --- | 30 |
| 31 | --- | | --- | | 281.704 | | 281.689 | 281.671 | | 281.823E | | --- | 31 |
| MEAN | --- | --- | --- | --- | 281.871 | 281.683 | 281.737 | 281.686 | 281.685 | 281.818 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 281.712 | 281.748 | 281.789 | 281.695 | 281.685 | 281.834 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 281.833 | 281.659 | 281.689 | 281.632 | 281.636 | 281.804 | --- | --- | MIN |

WATER LEVELS IN METRES

### SUMMARY FOR THE YEAR 1988

MAXIMUM DAILY, 281.789 ON JUL 4
MINIMUM DAILY, 281.804 ON OCT 27
MAXIMUM INSTANTANEOUS,
281.784 AT 08:09 CST ON JUL 4

TYPE OF GAUGE - RECORDING
LOCATION - LAT 54 45 30 N
LONG 101 49 30 W

A - MANUAL GAUGE
E - ESTIMATED

DRAINAGE AREA,
411 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1938 ADJ.)

## SCISSOR CREEK NEAR MCAULEY - STATION NO. 05ME008

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0 | 0.0038 | 0 | 0 | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | 0 | 0.0088 | 0 | 0 | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | 0 | 0.0248 | 0 | 0 | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | 0 | 0.0555 | 0 | 0 | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | 0 | 0.1218 | 0 | 0 | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | 0 | 0.0635 | 0 | 0 | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | 0 | 0.0348 | 0 | 0 | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | 0 | 0.0125 | 0 | 0 | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | 0 | 0.0048 | 0 | 0 | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | 0 | 0.0018 | 0 | 0 | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | 0 | | 0 | | --- | --- | | --- | --- | --- | 31 |
| TOTAL | --- | --- | 0 | 0.324 | 0 | 0 | --- | --- | --- | --- | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.011 | 0 | 0 | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.121 | 0 | 0 | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

### SUMMARY FOR THE MONTHS MAR TO JUN

MEAN, 0.003
MAXIMUM DAILY, 0.1218 ON APR 5
MINIMUM DAILY, 0 ON MAR 1

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 16 15 N
LONG 101 23 04 W
DRAINAGE AREA, 187 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | --- |
| FEB | --- | AUG | --- |
| MAR | 0 | SEP | --- |
| APR | 28.0 | OCT | --- |
| MAY | 0 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, 28.0 dam³

## RED RIVER BELOW GREAT ISLAND - STATION NO. 05OD001

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130B | 120B | 100 B | 83.6B | 78.3B | --- | 1 170E | 705E | 432E | 380 | 3630 | 2010 | 1 |
| 2 | 130B | 119B | 99.3B | 83.3B | 78.1B | --- | 1 160E | 693E | 428E | 354 | 3560 | 1900 | 2 |
| 3 | 130B | 119B | 98.3B | 82.4B | 78.2B | --- | 1 140E | 678E | 420E | 353 | 3510 | 1860 | 3 |
| 4 | 130B | 118B | 96.6B | 82.0B | 78.2B | --- | 1 120E | 671E | 410E | 353 | 3410 | 1860 | 4 |
| 5 | 130B | 117B | 95.0B | 81.6B | 78.4B | --- | 1 100E | 664E | 411E | 352 | 3380 | 1940 | 5 |
| 6 | 130B | 117B | 97.4B | 81.3B | 78.4B | --- | 1 080E | 655E | 407E | 351 | 3270 | 1930 | 6 |
| 7 | 129B | 116B | 96.4B | 80.6B | 78.6B | --- | 1 070E | 654E | 404E | 348 | 3210 | 1900 | 7 |
| 8 | 128B | 116B | 95.2B | 80.6B | 78.6B | --- | 1 080E | 641E | 400E | 348 | 3120 | 1880 | 8 |
| 9 | 126B | 115B | 95.6B | 80.2B | 78.6B | --- | 1 030E | 636E | 398E | 347 | 3020 | 1870 | 9 |
| 10 | 126B | 114B | 95.3B | 80.0B | 77.1B | --- | 1 020E | 606E | 397E | 348 | 2970 | 1880 | 10 |
| 11 | 126B | 113B | 94.6B | 78.7B | 86.3B | --- | 1 000E | 583E | 398A | 348 | 2880 | 1840 | 11 |
| 12 | 126B | 113B | 94.4B | 78.2B | 87.2B | --- | 980E | 580E | 399 | 355 | 2760 | 1820 | 12 |
| 13 | 127B | 113B | 93.6B | 78.6B | 102 B | --- | 974E | 570E | 396 | 356 | 2710 | 1820 | 13 |
| 14 | 127B | 113B | 93.3B | 78.4B | 187 B | --- | 930E | 580E | 387 | 361 | 2630 | 1800 | 14 |
| 16 | 127B | 111B | 93.0B | 78.2B | 204 B | --- | 945E | 552E | 392 | 366 | 2580 | 1780 | 15 |
| 16 | 126B | 110B | 92.0B | 77.7B | 287 B | --- | 920E | 547E | 385 | 367 | 2500 | 1770 | 16 |
| 17 | 126B | 108B | 91.6B | 77.6B | 330 B | --- | 914E | 542E | 386 | 380 | 2480 | 1760 | 17 |
| 18 | 126B | 108B | 90.6B | 77.3B | --- | --- | 898E | 534E | 386 | 383 | 2400 | 1760 | 18 |
| 19 | 125B | 106B | 90.2B | 77.1B | --- | --- | 884E | 528E | 388 | 377 | 2380 | 1730 | 19 |
| 20 | 126B | 107B | 88.7B | 76.9B | --- | --- | 888E | 515E | 388 | 376 | 2320 | 1730 | 20 |
| 21 | 126B | 106B | 89.6B | 76.7B | --- | 1 320A | 852E | 514E | 385 | 375 | 2270 | 1710 | 21 |
| 22 | 126B | 106B | 88.8B | 76.6B | --- | 1 330 | 840E | 506E | 391 | 375 | 2240 | 1700 | 22 |
| 23 | 124B | 106B | 86.4B | 76.1B | --- | 1 310 | 832E | 498E | 380 | 374 | 2200 | 1680 | 23 |
| 24 | 124B | 104B | 87.7B | 75.8B | --- | 1 290 | 808E | 482E | 361 | 373 | 2170 | 1670 | 24 |
| 25 | 123B | 104B | 87.1B | 75.7B | --- | 1 280 | 788E | 484E | 376 | 372 | 2140 | 1670 | 25 |
| 26 | 123B | 103B | 86.6B | 75.6B | --- | 1 260 | 784E | 478E | 384 | 373 | 2130 | 1660 | 26 |
| 27 | 123B | 102B | 86.0B | 75.5B | --- | 1 230 | 772E | 467E | 389 | 372A | 2100 | 1640 | 27 |
| 28 | 123B | 102B | 85.4B | 75.5B | --- | 1 210A | 758E | 461E | 388 | 374B | 2060 | 1620 | 28 |
| 29 | 123B | | 84.8B | 75.4B | --- | 1 200E | 744E | 454E | 388 | 374B | 2060 | 1620 | 29 |
| 30 | 121B | | 84.4B | 75.4B | --- | 1 180E | 732E | 448E | 387 | 372B | 2030 | 1610 | 30 |
| 31 | 121B | | 83.9B | --- | --- | | 717E | 439E | | 368B | | 1600 | 31 |
| TOTAL | 3 908 | 3 104 | 2 892.6 | 2 386.1 | --- | --- | 26 930 | 17 358 | 11 827 | 11 286 | 8 003 | 5 630 | TOTAL |
| MEAN | 126 | 111 | 92.0 | 79.5 | --- | --- | 933 | 560 | 394 | 364 | 267 | 178 | MEAN |
| MAX | 130 | 120 | 100 | 83.6 | --- | --- | 1 170 | 705 | 432 | 383 | 363 | 201 | MAX |
| MIN | 121 | 102 | 83.9 | 76.4 | --- | --- | 717 | 439 | 367 | 348 | 303 | 160 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MINIMUM DAILY, 75.1B ON MAY 2

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 53 30 N
LONG 96 16 31 W
DRAINAGE AREA, 48 100 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 336 000 | JUL | 2 500 000 |
| FEB | 268 000 | AUG | 1 500 000 |
| MAR | 248 000 | SEP | 1 020 000 |
| APR | 203 000 | OCT | 975 000 |
| MAY | --- | NOV | 681 000 |
| JUN | --- | DEC | 478 000 |

## SEINE RIVER AT STE. ANNE - STATION NO. 05OH002

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 248.778E | 248.812E | 248.882 | 248.882E | 248.827 | 248.887E | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 248.784 | 248.868 | 248.848E | 248.888 | 248.838 | 248.783E | --- | --- | 2 |
| 3 | --- | --- | --- | --- | 248.832E | 248.884 | 248.840 | 248.938 | 248.834E | 248.878 | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 248.840 | 248.885E | 248.830E | --- | 248.826E | 248.883 | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 248.878E | 248.847E | 248.820E | --- | 248.823E | 248.880E | --- | --- | 5 |
| 6 | --- | --- | --- | 248.618 | 248.873 | 248.838E | 248.810E | --- | 248.817E | 248.887 | --- | --- | 6 |
| 7 | --- | --- | --- | 248.618E | 248.881 | 248.830 | 248.800 | --- | 248.812 | 248.878E | --- | --- | 7 |
| 8 | --- | --- | --- | 248.621E | 248.834E | 248.887 | 248.807 | --- | 248.880 | 248.885E | --- | --- | 8 |
| 9 | --- | --- | --- | 248.624 | 248.882E | 248.848 | 248.870E | --- | 248.889 | 248.834E | --- | --- | 9 |
| 10 | --- | --- | --- | 248.624E | 248.883E | 248.878 | 248.888 | 248.848 | 248.847E | 248.813E | --- | --- | 10 |
| 11 | --- | --- | --- | 248.624E | 248.884E | 248.883E | 248.827E | 248.884 | 248.828E | 248.782E | --- | --- | 11 |
| 12 | --- | --- | --- | 248.624 | 248.884 | 248.887E | 248.800 | 248.889 | 248.802 | 248.772 | --- | --- | 12 |
| 13 | --- | --- | --- | 248.608E | 248.881 | 248.881 | 248.881E | 248.881E | 248.778E | 248.808 | --- | --- | 13 |
| 14 | --- | --- | --- | 248.588E | 248.880E | 248.818E | 248.888E | 248.853E | 248.748E | 248.824 | --- | --- | 14 |
| 15 | --- | --- | --- | 248.588 | 248.888E | 248.880 | 248.881 | 248.848 | 248.723 | 248.818E | --- | --- | 15 |
| 16 | --- | --- | --- | 248.568E | 248.887E | 248.882 | 248.883E | 248.849E | 248.714 | 248.814E | --- | --- | 16 |
| 17 | --- | --- | --- | 248.532 | 248.888 | 248.848E | 248.875E | 248.884 | 248.708E | 248.802E | --- | --- | 17 |
| 18 | --- | --- | --- | 248.528 | 248.840E | 248.838E | 248.868E | 248.883 | 248.898E | 248.804E | --- | --- | 18 |
| 19 | --- | --- | --- | 248.580E | 248.835 | 248.833E | 248.880 | 248.887E | 248.898E | 248.789 | --- | --- | 19 |
| 20 | --- | --- | --- | 248.580 | 248.808 | 248.828E | 248.881 | 248.833E | 248.882E | 248.672 | --- | --- | 20 |
| 21 | --- | --- | --- | 248.178E | 248.813E | 248.818 | 248.800E | 248.888E | 248.874 | 248.814 | --- | --- | 21 |
| 22 | --- | --- | --- | 248.106E | 248.814E | 248.802E | 248.808 | 248.880 | 248.888 | 248.777E | --- | --- | 22 |
| 23 | --- | --- | --- | 248.033E | 248.818E | 248.888 | 248.888E | 248.883E | 248.841 | 248.738E | --- | --- | 23 |
| 24 | --- | --- | --- | 248.880E | 248.818 | 248.884 | 248.880E | 248.828E | 248.838E | 248.701E | --- | --- | 24 |
| 25 | --- | --- | --- | 248.887 | 248.803 | 248.884 | 248.888 | 248.887 | 248.831 | 248.883E | --- | --- | 25 |
| 26 | --- | --- | --- | 248.827 | 248.803E | 248.888E | 248.848E | 248.878 | 248.824E | 248.825 | --- | --- | 26 |
| 27 | --- | --- | --- | 248.788 | 248.803 | 248.818E | 248.830E | 248.888E | 248.818 | 248.825 | --- | --- | 27 |
| 28 | --- | --- | --- | 248.782E | 248.812E | 248.831E | 248.811 | 248.884E | 248.808E | 248.828 | --- | --- | 28 |
| 29 | --- | | --- | 248.787E | 248.820E | 248.843E | 248.883 | 248.802E | 248.800E | --- | --- | --- | 29 |
| 30 | --- | | --- | 248.773E | 248.828E | 248.888 | 248.848 | 248.810E | 248.882 | --- | --- | --- | 30 |
| 31 | --- | | --- | | 248.837 | | 248.888E | 248.818 | | --- | --- | --- | 31 |
| MEAN | --- | --- | --- | --- | 248.828 | 248.888 | 248.818 | --- | 248.787 | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 248.880 | 248.888 | 248.882 | --- | 248.838 | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 248.778 | 248.830 | 248.811 | --- | 248.882 | --- | --- | --- | MIN |

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 39 51 N
LONG 96 38 58 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1963

DRAINAGE AREA, 893 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## SEINE RIVER DIVERSION NEAR ILE DES CHENES - STATION NO. 05OE011

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 1.38 | 0.176 | 0.614 | 0.008 | 0.043 | 0.012 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 1.31 | 0.178 | 1.13 | 0.007 | 0.042 | 0.010 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0.881 | 0.178 | 1.16 | 0.008 | 0.041 | 0.012 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 0.486 | 0.138 | 0.745 | 0.008 | 0.038 | 0.008 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 B | 0.343 | 0.116 | 0.428 | 0.008 | 0.038 | 0.034 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0.0012 | 0.374 | 0.086 | 0.288 | 0.006 | 0.032 | 0.148 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.0038 | 0.283 | 0.130 | 0.203 | 0.003 | 0.036 | 0.203 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.0018 | 0.278 | 0.111 | 0.156 | 0.004 | 0.033 | 0.188 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0 B | 0.268 | 0.147 | 0.138 | 0.012 | 0.030 | 0.181 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0 B | 0.269 | 0.186 | 0.140 | 0.028 | 0.027 | 0.138 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.0018 | 0.284 | 0.200 | 0.132 | 0.040 | 0.028 | 0.114 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.1118 | 0.288 | 0.218 | 0.147 | 0.046 | 0.023 | 0.101 | --- | --- | 12 |
| 13 | --- | --- | 0B | 1.83 B | 0.224 | 0.248 | 0.135 | 0.041 | 0.020 | 0.088 | --- | --- | 13 |
| 14 | --- | --- | 0B | 2.84 B | 0.198 | 0.280 | 0.133 | 0.037 | 0.018 | 0.094 | --- | --- | 14 |
| 15 | --- | --- | 0B | 5.21 B | 0.182 | 0.282 | 0.120 | 0.027 | 0.013 | 0.094 | --- | --- | 15 |
| 16 | --- | --- | 0B | 33.8 B | 0.131 | 0.287 | 0.104 | 0.018 | 0.010 | 0.088 | --- | --- | 16 |
| 17 | --- | --- | 0B | 18.3 B | 0.107 | 0.448 | 0.088 | 0.008 | 0.008 | 0.082 | --- | --- | 17 |
| 18 | --- | --- | 0B | 18.3 B | 0.242 | 0.384 | 0.083 | 0.008 | 0.007 | 0.094 | --- | --- | 18 |
| 19 | --- | --- | 0B | 18.1 B | 0.358 | 0.348 | 0.087 | 0.022 | 0.008 | 0.088 | --- | --- | 19 |
| 20 | --- | --- | 0B | 13.9 B | 0.284 | 0.283 | 0.077 | 0.101 | 0.008 | 0.080 | --- | --- | 20 |
| 21 | --- | --- | 0B | 10.8 B | 0.338 | 0.233 | 0.073 | 0.138 | 0.008 | 0.131 | --- | --- | 21 |
| 22 | --- | --- | 0B | 8.78 | 0.378 | 0.186 | 0.087 | 0.183 | 0.008 | 0.184 | --- | --- | 22 |
| 23 | --- | --- | 0B | 6.89 | 0.238 | 0.158 | 0.089 | 0.208 | 0.008 | 0.184 | --- | --- | 23 |
| 24 | --- | --- | 0B | 7.00 | 0.218 | 0.135 | 0.048 | 0.137 | 0.010 | 0.150 | --- | --- | 24 |
| 25 | --- | --- | 0B | 5.85 | 0.204 | 0.147 | 0.038 | 0.089 | 0.010 | 0.141 | --- | --- | 25 |
| 26 | --- | --- | 0B | 4.12 | 0.201 | 0.114 | 0.028 | 0.084 | 0.010 | 0.135 | --- | --- | 26 |
| 27 | --- | --- | 0B | 3.11 | 0.198 | 0.111 | 0.021 | 0.084 | 0.011 | 0.188 | --- | --- | 27 |
| 28 | --- | --- | 0B | 2.35 | 0.183 | 0.186 | 0.017 | 0.080 | 0.012 | 0.177 | --- | --- | 28 |
| 29 | --- | | 0B | 1.84 | 0.172 | 0.210 | 0.014 | 0.048 | 0.012 | 0.150 | --- | --- | 29 |
| 30 | --- | | 0B | 1.67 | 0.187 | 0.282 | 0.013 | 0.047 | 0.012 | 0.138A | --- | --- | 30 |
| 31 | --- | | 0B | | 0.175 | | 0.010 | 0.045 | | 0.135E | | --- | 31 |
| TOTAL | --- | --- | 0 | 148.717 | 10.378 | 8.212 | 5.529 | 1.603 | 0.581 | 3.548 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 4.95 | 0.335 | 0.207 | 0.211 | 0.048 | 0.020 | 0.114 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 33.8 | 1.38 | 0.448 | 1.16 | 0.208 | 0.043 | 0.203 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0.107 | 0.088 | 0.010 | 0.003 | 0.006 | 0.008 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.724
MAXIMUM DAILY, 33.8B ON APR 16
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
35.1 AT 14:00 CST ON APR 16

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 41 40 N
LONG 96 59 10 W
DRAINAGE AREA, 1 610 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 584 |
| FEB | --- | AUG | 130 |
| MAR | 0 | SEP | 51.1 |
| APR | 13 800 | OCT | 306 |
| MAY | 897 | NOV | --- |
| JUN | 637 | DEC | --- |

TOTAL DISCHARGE, 15 300 dam³

## SEINE RIVER DIVERSION NEAR STE. ANNE - STATION NO. 05OH005

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 1.12 | 0.004 | 0.152 | 0 | 0 | 0.001 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.758 | 0.003 | 0.108 | 0 | 0 | 0.001 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0.041 | 0.003 | 0.024 | 0 | 0 | 0.001 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 0.110 | 0.003 | 0.003 | 0 | 0 | 0.002 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 B | 0.198 | 0.003 | 0.002 | 0 | 0 | 0.002 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0 B | 0.381 | 0.003 | 0.001 | 0 | 0 | 0.001 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0 B | 0.318 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0 B | 0.394 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0 B | 0.371 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0 B | 0.422 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0 B | 0.338 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.1008 | 0.306 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.2008 | 0.074 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.1408 | 0.007 | 0.040 | 0 E | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.1508 | 0.004 | 0.588 | 0 E | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.1408 | 0.003 | 0.567 | 0 E | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.8188 | 0.003 | 0.422 | 0 E | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.2308 | 0.003 | 0.243 | 0 E | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 1.03 B | 0.003 | 0.082 | 0 E | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 1.78 B | 0.003 | 0.014 | 0 E | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 3.48 B | 0.003 | 0.003 | 0 E | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 4.67 | 0.003 | 0.003 | 0 E | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 3.80 | 0.003 | 0.003 | 0 E | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 3.85 | 0.002 | 0.003 | 0 E | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 3.61 | 0.002 | 0.003 | 0 A | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 1.85 | 0.003 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 1.62 | 0.003 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 1.33 | 0.015 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 1.27 | 0.078 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 1.30 | 0.021 | 0.140 | 0 | 0 | 0.001 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0.007 | | 0 | 0 | | 0 A | | --- | 31 |
| TOTAL | --- | --- | 0 | 39.685 | 4.974 | 3.170 | 0.291 | 0 | 0.001 | 0.008 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.887 | 0.161 | 0.072 | 0.008 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 4.67 | 1.12 | 0.588 | 0.152 | 0 | 0.001 | 0.002 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0.002 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.151
MAXIMUM DAILY, 4.67 ON APR 23
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
5.88 AT 21:00 CST ON APR 21

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 39 10 N
LONG 96 39 10 W
DRAINAGE AREA, 880 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 28.1 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0.08 |
| APR | 2 880 | OCT | 0.88 |
| MAY | 404 | NOV | --- |
| JUN | 187 | DEC | --- |

TOTAL DISCHARGE, 3 300 dam³

## SEINE RIVER NEAR STE. ANNE - STATION NO. 05OH007

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.1158 | 0.1258 | 1.08 | 0.898 | 1.84 | 0.038 | 0.207 | 0.041 | --- | --- | 1 |
| 2 | --- | --- | 0.1158 | 0.1308 | 1.18 | 0.898 | 1.77 | 0.028 | 0.332 | 0.053 | --- | --- | 2 |
| 3 | --- | --- | 0.1158 | 0.1358 | 1.27 | 0.851 | 1.47 | 0.080 | 0.180 | 0.058 | --- | --- | 3 |
| 4 | --- | --- | 0.1158 | 0.1408 | 1.43 | 0.650 | 1.10 | 0.185 | 0.133 | 0.066 | --- | --- | 4 |
| 5 | --- | --- | 0.1158 | 0.1458 | 1.43 | 0.611 | 1.00 | 0.158 | 0.092 | 0.053 | --- | --- | 5 |
| 6 | --- | --- | 0.1158 | 0.1508 | 1.70 | 0.402 | 0.780 | 0.228 | 0.088 | 0.088 | --- | --- | 6 |
| 7 | --- | --- | 0.1158 | 0.1558 | 1.88 | 0.488 | 0.880 | 0.278 | 0.087 | 0.108 | --- | --- | 7 |
| 8 | --- | --- | 0.1158 | 0.1608 | 1.83 | 0.413 | 0.848 | 0.182 | 0.042 | 0.117 | --- | --- | 8 |
| 9 | --- | --- | 0.1158 | 0.1708 | 1.78 | 0.888 | 0.430 | 0.138 | 0.038 | 0.108 | --- | --- | 9 |
| 10 | --- | --- | 0.1158 | 0.1808 | 1.88 | 0.838 | 0.383 | 0.108 | 0.038 | 0.087 | --- | --- | 10 |
| 11 | --- | --- | 0.1158 | 0.2008 | 1.88 | 0.883 | 0.311 | 0.078 | 0.038 | 0.084 | --- | --- | 11 |
| 12 | --- | --- | 0.1158 | 0.3008 | 1.42 | 0.588 | 0.314 | 0.088 | 0.038 | 0.108 | --- | --- | 12 |
| 13 | --- | --- | 0.1158 | 0.3628 | 1.20 | 0.781 | 0.310 | 0.041 | 0.077 | 0.084 | --- | --- | 13 |
| 14 | --- | --- | 0.1158 | 0.4008 | 1.04 | 1.67 | 0.300 | 0.028 | 0.088 | 0.104 | --- | --- | 14 |
| 15 | --- | --- | 0.1158 | 0.5008 | 0.898 | 2.18 | 0.335 | 0.030 | 0.048 | 0.138 | --- | --- | 15 |
| 16 | --- | --- | 0.1158 | 0.6008 | 0.784 | 1.85 | 0.314 | 0.018 | 0.158 | 0.148 | --- | --- | 16 |
| 17 | --- | --- | 0.1158 | 0.7008 | 0.674 | 1.84 | 0.288 | 0.041 | 0.180 | 0.138 | --- | --- | 17 |
| 18 | --- | --- | 0.1158 | 0.8008 | 0.828 | 1.48 | 0.330 | 0.080 | 0.103 | 0.132 | --- | --- | 18 |
| 19 | --- | --- | 0.1158 | 1.00 B | 0.884 | 1.18 | 0.327 | 0.117 | 0.048 | 0.188 | --- | --- | 19 |
| 20 | --- | --- | 0.1158 | 1.51 B | 0.830 | 0.884 | 0.287 | 0.282 | 0.030 | 0.178 | --- | --- | 20 |
| 21 | --- | --- | 0.1158 | 2.36 B | 0.814 | 0.842 | 0.188 | 0.448 | 0.021 | 0.182 | --- | --- | 21 |
| 22 | --- | --- | 0.1158 | 2.81 B | 1.18 | 0.888 | 0.180 | 0.804 | 0.011 | 0.184 | --- | --- | 22 |
| 23 | --- | --- | 0.1158 | 2.36 B | 1.08 | 0.892 | 0.141 | 0.415 | 0.006 | 0.288 | --- | --- | 23 |
| 24 | --- | --- | 0.1158 | 2.61 | 0.884 | 0.810 | 0.133 | 0.303 | 0.011 | 0.197 | --- | --- | 24 |
| 25 | --- | --- | 0.1158 | 2.18 | 0.838 | 0.588 | 0.118 | 0.221 | 0.008 | 0.188 | --- | --- | 25 |
| 26 | --- | --- | 0.1158 | 1.72 | 0.782 | 0.482 | 0.103 | 0.211 | 0.004 | 0.148 | --- | --- | 26 |
| 27 | --- | --- | 0.1208 | 1.44 | 1.18 | 0.474 | 0.080 | 0.178 | 0.004 | 0.188 | --- | --- | 27 |
| 28 | --- | --- | 0.1208 | 1.21 | 1.43 | 0.438 | 0.142 | 0.146 | 0.008 | 0.185 | --- | --- | 28 |
| 29 | --- | | 0.1258 | 1.21 | 1.28 | 0.544 | 0.108 | 0.133 | 0.032 | 0.187 | --- | --- | 29 |
| 30 | --- | | 0.1258 | 1.14 | 1.17 | 1.81 | 0.083 | 0.137 | 0.047 | 0.140 | --- | --- | 30 |
| 31 | --- | | 0.1258 | | 1.03 | | 0.042 | 0.148 | | 0.127A | | --- | 31 |
| TOTAL | --- | --- | 3.805 | 35.882 | 38.188 | 28.080 | 13.722 | 5.027 | 1.885 | 3.888 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.118 | 0.888 | 1.17 | 0.889 | 0.443 | 0.182 | 0.088 | 0.128 | --- | --- | MEAN |
| MAX | --- | --- | 0.128 | 2.81 | 1.78 | 2.18 | 1.77 | 0.804 | 0.332 | 0.288 | --- | --- | MAX |
| MIN | --- | --- | 0.115 | 0.128 | 0.828 | 0.402 | 0.042 | 0.018 | 0.004 | 0.041 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.475
MAXIMUM DAILY, 2.81 ON APR 24
MINIMUM DAILY, 0.004 ON SEP 26
MAXIMUM INSTANTANEOUS,
2.868 AT 03:48 CST ON APR 21

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 39 10 N
LONG 96 37 00 W
DRAINAGE AREA, 888 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL 1 | 190 |
| FEB | --- | AUG | 434 |
| MAR | 311 | SEP | 172 |
| APR 2 | 240 | OCT | 338 |
| MAY 3 | 120 | NOV | --- |
| JUN 2 | 350 | DEC | --- |

TOTAL DISCHARGE, 10 100 dam³

## SEINE RIVER SOUTH OF PRAIRIE GROVE - STATION NO. 05OH008

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.0088 | 0.0188 | 0.2108 | 1.18 | 0.880 | 0.088 | 0.158 | 0.003 | --- | --- | 1 |
| 2 | --- | --- | 0.0088 | 0.0188 | 0.183A | 1.12 | 1.18 | 0.048 | 0.118 | 0.003 | --- | --- | 2 |
| 3 | --- | --- | 0.0088 | 0.0198 | 0.138 | 1.08 | 1.32 | 0.048 | 0.083 | 0.003 | --- | --- | 3 |
| 4 | --- | --- | 0.0088 | 0.0418 | 0.383 | 0.911 | 1.28 | 0.088 | 0.082 | 0.003 | --- | --- | 4 |
| 5 | --- | --- | 0.0088 | 0.1008 | 1.84 | 0.778 | 1.28 | 0.087 | 0.082 | 0.003 | --- | --- | 5 |
| 6 | --- | --- | 0.0088 | 0.1578 | 1.27 | 0.686 | 1.35 | 0.083 | 0.184 | 0.003 | --- | --- | 6 |
| 7 | --- | --- | 0.0088 | 0.2008 | 1.25 | 0.718 | 1.28 | 0.038 | 0.232 | 0.003 | --- | --- | 7 |
| 8 | --- | --- | 0.0088 | 0.1988 | 1.25 | 0.884 | 1.17 | 0.044 | 0.188 | 0.025 | --- | --- | 8 |
| 9 | --- | --- | 0.0088 | 0.1878 | 1.23 | 0.708 | 1.01 | 0.117 | 0.139 | 0.240 | --- | --- | 9 |
| 10 | --- | --- | 0.0088 | 0.1888 | 1.23 | 0.884 | 0.784 | 0.118 | 0.118 | 0.311 | --- | --- | 10 |
| 11 | --- | --- | 0.0108 | 0.2408 | 1.32 | 0.880 | 0.851 | 0.170 | 0.093 | 0.178 | --- | --- | 11 |
| 12 | --- | --- | 0.0128 | 0.3488 | 1.21 | 0.882 | 0.883 | 0.188 | 0.074 | 0.188 | --- | --- | 12 |
| 13 | --- | --- | 0.0158 | 0.6288 | 1.21 | 1.02 | 0.474 | 0.143 | 0.083 | 0.204 | --- | --- | 13 |
| 14 | --- | --- | 0.0178 | 1.14 B | 1.21 | 1.13 | 0.371 | 0.102 | 0.083 | 0.134 | --- | --- | 14 |
| 15 | --- | --- | 0.0208 | 1.32 B | 1.18 | 1.30 | 0.318 | 0.077 | 0.037 | 0.188 | --- | --- | 15 |
| 16 | --- | --- | 0.0288 | 2.81 B | 1.08 | 1.48 | 0.288 | 0.055 | 0.024 | 0.105 | --- | --- | 16 |
| 17 | --- | --- | 0.0278 | 3.08 B | 0.888 | 1.48 | 0.280 | 0.028 | 0.014 | 0.087 | --- | --- | 17 |
| 18 | --- | --- | 0.0288 | 3.62 B | 0.887 | 1.38 | 0.292 | 0.037 | 0.007 | 0.080 | --- | --- | 18 |
| 19 | --- | --- | 0.0278 | 4.43 B | 0.842 | 1.29 | 0.123 | 0.044 | 0.008 | 0.088 | --- | --- | 19 |
| 20 | --- | --- | 0.0258 | 5.27 B | 0.808 | 1.21 | 0.108 | 0.038 | 0.008 | 0.101 | --- | --- | 20 |
| 21 | --- | --- | 0.0208 | 6.30 B | 0.784 | 1.13 | 0.833 | 0.038 | 0.008 | 0.108 | --- | --- | 21 |
| 22 | --- | --- | 0.0188 | 7.87 B | 0.797 | 1.08 | 0.278 | 0.025 | 0.008 | 0.110 | --- | --- | 22 |
| 23 | --- | --- | 0.0178 | 8.78 B | 0.889 | 0.980 | 0.182 | 0.012 | 0.008 | 0.130 | --- | --- | 23 |
| 24 | --- | --- | 0.0188 | 3.78 B | 1.03 | 0.842 | 0.182 | 0.038 | 0.003 | 0.178 | --- | --- | 24 |
| 25 | --- | --- | 0.0188 | 2.34 | 1.09 | 0.798 | 0.158 | 0.383 | 0.003 | 0.192 | --- | --- | 25 |
| 26 | --- | --- | 0.0188 | 1.37 | 1.07 | 0.721 | 0.140 | 0.888 | 0.003 | 0.328 | --- | --- | 26 |
| 27 | --- | --- | 0.0188 | 0.837 | 0.988 | 0.838 | 0.122 | 0.478 | 0.003 | 0.278 | --- | --- | 27 |
| 28 | --- | --- | 0.0188 | 0.577 | 0.840 | 0.851 | 0.104 | 0.348 | 0.003 | 0.188 | --- | --- | 28 |
| 29 | --- | | 0.0188 | 0.418A | 1.00 | 0.802 | 0.087 | 0.288 | 0.003 | 0.134 | --- | --- | 29 |
| 30 | --- | | 0.0188 | 0.3048 | 1.17 | 0.814 | 0.080 | 0.232 | 0.003 | 0.128 | --- | --- | 30 |
| 31 | --- | | 0.0188 | | 1.18 | | 0.072 | 0.198 | | 0.182A | | --- | 31 |
| TOTAL | --- | --- | 0.482 | 84.478 | 30.280 | 28.151 | 18.820 | 4.138 | 1.776 | 3.848 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.015 | 1.83 | 0.977 | 0.838 | 0.843 | 0.133 | 0.058 | 0.124 | --- | --- | MEAN |
| MAX | --- | --- | 0.038 | 7.87 | 1.84 | 1.48 | 1.38 | 0.888 | 0.232 | 0.338 | --- | --- | MAX |
| MIN | --- | --- | 0.008 | 0.018 | 0.138 | 0.802 | 0.072 | 0.012 | 0.003 | 0.003 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.871
MAXIMUM DAILY, 7.878 ON APR 22
MINIMUM DAILY, 0.003 ON SEP 24
MAXIMUM INSTANTANEOUS,
8.38 AT 19:24 CST ON APR 16

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 48 15 N
LONG 96 57 27 W
DRAINAGE AREA, 888 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
REGULATED SINCE 1981

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL 1 | 450 |
| FEB | --- | AUG | 367 |
| MAR | 39.8 | SEP | 154 |
| APR 4 | 710 | OCT | 332 |
| MAY 2 | 620 | NOV | --- |
| JUN 2 | 430 | DEC | --- |

TOTAL DISCHARGE, 12 100 dam³

## SHANNON CREEK NEAR MORRIS - STATION NO. 05OF014

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.288 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.204 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0.194 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 0.171 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 B | 0.139 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0 B | 0.113 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0 B | 0.094 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0 B | 0.088 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0 B | 0.082 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0 B | 0.048A | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0 B | 0.042A | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0 B | 0.038A | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0 B | 0.031A | 0 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.0078 B | 0.022A | 0 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 1.80 B | 0.024A | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 16.5 B | 0.027A | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 14.8 B | 0.036A | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 11.3 B | 0.042A | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 10.8 B | 0.048A | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 8.61 B | 0.045A | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 6.67 B | 0.040A | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 4.83 | 0.033A | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 3.02 | 0.027A | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 1.88 | 0.021A | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 1.35 | 0.018A | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 1.08 | 0.018A | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.884 | 0.017A | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.674 | 0.016A | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.592 | 0.012A | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.435 | 0.008A | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0 A | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 85.262 | 1.934 | 0 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 2.84 | 0.062 | 0 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 16.5 | 0.256 | 0 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.358
MAXIMUM DAILY, 16.80 ON APR 16
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
23.4 AT 08:57 CST ON APR 16

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 31 17 N
LONG 97 25 16 W
DRAINAGE AREA, 848 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 7 370 | OCT | 0 |
| MAY | 187 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, 7 560 dam³

## SHANNON CREEK NEAR WINKLER - STATION NO. 05OF022

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0.035 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0.015 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0 B | 0 | 0A | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0 B | 0 | 0E | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.0118 | 0 | 0E | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.4538 | 0 | 0A | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.1778 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.1048 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.1048 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.2088 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 1.48 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.8128 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.374 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.313 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.328 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.350 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.367 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.374 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.187 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.140 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.084 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.081 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 8.818 | 0.053 | 0 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.284 | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 1.48 | 0.035 | 0 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.023
MAXIMUM DAILY, 1.480 ON APR 19
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
3.080 AT 05:02 CST ON APR 19

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 18 55 N
LONG 97 53 15 W
DRAINAGE AREA, 308 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 477 | OCT | 0 |
| MAY | 4.58 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, 482 dam³

## SHARPE LAKE NEAR DELORAINE - STATION NO. 05MF005

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | --- | 888.873 | 888.870E | 888.748E | 888.615 | 888.580 | 888.520E | --- | 1 |
| 2 | --- | --- | --- | --- | --- | 888.888E | 888.871E | 888.743 | 888.615E | 888.580E | 888.520 | --- | 2 |
| 3 | --- | --- | --- | --- | --- | 888.883 | 888.873 | 888.738E | 888.623E | 888.580 | --- | --- | 3 |
| 4 | --- | --- | --- | --- | --- | 888.883E | 888.887E | 888.733 | 888.628E | 888.580E | --- | --- | 4 |
| 5 | --- | --- | --- | --- | --- | 888.883 | 888.882 | 888.728E | 888.630 | 888.580 | --- | --- | 5 |
| 6 | --- | --- | --- | --- | --- | 888.883E | 888.887E | 888.724 | 888.625E | 888.585E | --- | --- | 6 |
| 7 | --- | --- | --- | --- | --- | 888.883 | 888.882 | 888.714E | 888.620 | 888.580 | --- | --- | 7 |
| 8 | --- | --- | --- | --- | --- | 888.888E | 888.887E | 888.704 | 888.625E | 888.585E | --- | --- | 8 |
| 9 | --- | --- | --- | --- | --- | 888.883 | 888.882 | 888.699E | 888.630 | 888.585E | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 888.888 | 888.883E | 888.882E | 888.884 | 888.625E | 888.585E | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 888.888E | 888.883 | 888.842 | 888.889E | 888.620 | 888.585E | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 888.883 | 888.888E | 888.837E | 888.884 | 888.615E | 888.644E | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 888.888E | 888.882 | 888.833 | 888.884E | 888.610 | 888.643E | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 888.883 | 888.887E | 888.832E | 888.884 | 888.605E | 888.642E | --- | --- | 14 |
| 15 | --- | --- | --- | --- | 888.878E | 888.882 | 888.832 | 888.879E | 888.800 | 888.640 | --- | --- | 15 |
| 16 | --- | --- | --- | --- | 888.873 | 888.882E | 888.827E | 888.874 | 888.800E | 888.635E | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 888.883E | 888.882 | 888.822 | 888.874E | 888.800 | 888.630 | --- | --- | 17 |
| 18 | --- | --- | --- | --- | 888.883 | 888.887E | 888.817E | 888.874 | 888.805E | 888.630E | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 888.883E | 888.882 | 888.812 | 888.888E | 888.590 | 888.630 | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 888.883 | 888.877E | 888.807E | 888.884 | 888.585E | 888.630E | --- | --- | 20 |
| 21 | --- | --- | --- | --- | 888.888E | 888.872 | 888.803 | 888.858E | 888.640 | 888.630 | --- | --- | 21 |
| 22 | --- | --- | --- | --- | 888.883 | 888.887E | 888.798E | 888.884 | 888.675E | 888.630E | --- | --- | 22 |
| 23 | --- | 888.838 | --- | --- | 888.883E | 888.882 | 888.783 | 888.849E | 888.670 | 888.630 | --- | --- | 23 |
| 24 | --- | --- | --- | --- | 888.883 | 888.883E | 888.788E | 888.844 | 888.685E | 888.625E | --- | --- | 24 |
| 25 | --- | --- | --- | --- | 888.888E | 888.884E | 888.783 | 888.845E | 888.680 | 888.620 | --- | --- | 25 |
| 26 | --- | --- | --- | --- | 888.883 | 888.885E | 888.778E | 888.845 | 888.680E | 888.620E | --- | --- | 26 |
| 27 | --- | --- | --- | --- | 888.888E | 888.888E | 888.773 | 888.840E | 888.680 | 888.620 | --- | --- | 27 |
| 28 | --- | --- | --- | --- | 888.883 | 888.887E | 888.768E | 888.835 | 888.685E | 888.620E | --- | --- | 28 |
| 29 | --- | | --- | --- | 888.878E | 888.888E | 888.763 | 888.830E | 888.670 | 888.620 | --- | --- | 29 |
| 30 | --- | | --- | --- | 888.873 | 888.888E | 888.758E | 888.825 | 888.685E | 888.620E | --- | --- | 30 |
| 31 | --- | | --- | | 888.873E | | 888.753 | 888.820E | | 888.620 | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | 888.870 | 888.818 | 888.878 | 888.688 | 888.638 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | 888.892 | 888.872 | 888.748 | 888.630 | 888.680 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | 888.883 | 888.753 | 888.820 | 888.880 | 888.620 | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 02 42 N
LONG 100 19 39 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1959

DRAINAGE AREA,
19.8 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## SMELL RIVER NEAR INGLIS - STATION NO. 05MD005

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5788 | 0.5428 | 0.5078 | 2.758 | 3.08 | 1.73 | 5.30 | 0.810 | 1.43 | 1.42 | 2.58 | 1.488 | 1 |
| 2 | 0.6348 | 0.5808 | 0.5168 | 5.018 | 2.72 | 1.71 | 5.18 | 0.882 | 1.48 | 1.48 | 2.488 | 1.488 | 2 |
| 3 | 0.6278 | 0.5728 | 0.4888 | 4.878 | 2.58 | 1.68 | 4.48 | 0.918 | 1.84 | 1.50 | 2.448 | 1.488 | 3 |
| 4 | 0.6178 | 0.5858 | 0.4808 | 4.588 | 2.44 | 1.48 | 4.03 | 0.473 | 1.88 | 1.51 | 2.51 | 1.448 | 4 |
| 5 | 0.5988 | 0.6038 | 0.4748 | 3.378 | 2.31 | 1.42 | 3.73 | 0.833 | 1.87 | 1.84 | 2.55 | 1.438 | 5 |
| 6 | 0.5.28 | 0.6848 | 0.5718 | 2.828 | 2.18 | 1.46 | 3.31 | 0.838 | 1.87 | 1.80 | 2.48 | 1.418 | 6 |
| 7 | 0.5228 | 0.5808 | 0.8448 | 2.648 | 2.08 | 1.88 | 2.80 | 0.911 | 1.40 | 1.82 | 2.448 | 1.388 | 7 |
| 8 | 0.5648 | 0.5828 | 0.5008 | 3.178 | 1.81 | 1.88 | 2.71 | 0.888 | 1.28 | 1.82 | 2.42 | 1.388 | 8 |
| 9 | 0.5438 | 0.6068 | 0.4388 | 2.838 | 1.82 | 1.86 | 2.58 | 0.784 | 1.08 | 1.89 | 2.38 | 1.308 | 9 |
| 10 | 0.5228 | 0.6348 | 0.4898 | 1.888 | 1.72 | 1.82 | 2.80 | 0.674 | 0.868 | 1.84 | 2.388 | 1.288 | 10 |
| 11 | 0.5548 | 0.6388 | 0.4208 | 1.138 | 1.63 | 1.99 | 2.84 | 0.822 | 0.815 | 1.84 | 2.348 | 1.238 | 11 |
| 12 | 0.6048 | 0.6218 | 0.2748 | 1.008 | 1.58 | 2.87 | 2.61 | 0.588 | 0.812 | 1.83 | 2.308 | 1.188 | 12 |
| 13 | 0.6548 | 0.6128 | 0.2018 | 1.128 | 1.56 | 2.83 | 2.88 | 0.536 | 0.787 | 1.85 | 2.268 | 1.168 | 13 |
| 14 | 0.6838 | 0.6108 | 0.1888 | 1.578 | 1.58 | 2.81 | 2.71 | 0.527 | 0.887 | 1.84 | 2.218 | 1.158 | 14 |
| 15 | 0.6148 | 0.5988 | 0.1888 | 2.31 | 1.84 | 2.83 | 2.41 | 0.478 | 0.843 | 1.87 | 2.178 | 1.128 | 15 |
| 16 | 0.6088 | 0.6028 | 0.2488 | 2.78 | 1.88 | 2.88 | 2.13 | 0.418 | 0.841 | 1.88 | 2.118 | 1.118 | 16 |
| 17 | 0.6078 | 0.5778 | 0.3318 | 2.74 | 1.87 | 3.80 | 1.88 | 0.388 | 1.08 | 1.80 | 2.078 | 1.088 | 17 |
| 18 | 0.6058 | 0.7418 | 0.3848 | 2.58 | 1.88 | 4.44 | 1.83 | 0.364 | 1.12 | 1.82 | 2.038 | 1.088 | 18 |
| 19 | 0.6158 | 0.7838 | 0.4278 | 2.82 | 1.88 | 4.73 | 1.71 | 0.532 | 1.11 | 1.80 | 1.978 | 1.128 | 19 |
| 20 | 0.6358 | 0.7008 | 0.4608 | 2.81 | 1.80 | 4.84 | 1.58 | 0.884 | 1.18 | 1.89 | 1.928 | 1.098 | 20 |
| 21 | 0.6288 | 0.6238 | 0.4618 | 3.18 | 1.42 | 4.21 | 1.48 | 0.781 | 1.10 | 1.86 | 1.868 | 1.088 | 21 |
| 22 | 0.6268 | 0.6208 | 0.5128 | 3.37 | 1.40 | 3.77 | 1.31 | 0.803 | 1.12 | 1.83 | 1.818 | 1.078 | 22 |
| 23 | 0.6288 | 0.6258 | 0.4488 | 3.48 | 1.38 | 3.34 | 1.28 | 0.717 | 1.10 | 1.81 | 1.748 | 1.058 | 23 |
| 24 | 0.6248 | 0.6888 | 0.3738 | 3.48 | 1.41 | 2.88 | 1.18 | 0.887 | 1.15 | 1.86 | 1.718 | 1.028 | 24 |
| 25 | 0.6318 | 0.6988 | 0.3338 | 3.40 | 1.62 | 2.82 | 1.08 | 0.780 | 1.22 | 1.86 | 1.678 | 1.048 | 25 |
| 26 | 0.6338 | 0.6518 | 2.58 B | 3.77 | 1.88 | 3.01 | 0.988 | 0.784 | 1.30 | 1.49 | 1.678 | 1.048 | 26 |
| 27 | 0.6178 | 0.6808 | 1.78 B | 4.08 | 1.87 | 3.14 | 0.818 | 0.886 | 1.38 | 1.84 | 1.648 | 1.078 | 27 |
| 28 | 0.6008 | 0.6288 | 1.18 B | 3.81 | 1.83 | 2.88 | 0.847 | 0.784 | 1.38 | 1.78 | 1.608 | 1.048 | 28 |
| 29 | 0.5798 | | 0.8818 | 3.78 | 1.83 | 2.71 | 0.824 | 1.38 | 1.42 | 1.88 | 1.578 | 1.088 | 29 |
| 30 | 0.5618 | | 0.8898 | 3.84 | 1.77 | 2.84 | 0.781 | 1.80 | 1.41 | 1.85 | 1.538 | 1.018 | 30 |
| 31 | 0.8588 | | 0.8218 | | 1.88A | | 0.777 | 1.82 | | 1.74 | | 1.028 | 31 |
| TOTAL | 18.818 | 17.148 | 17.841 | 80.38 | 55.31 | 81.24 | 70.880 | 23.884 | 38.480 | 48.81 | 62.78 | 38.78 | TOTAL |
| MEAN | 0.800 | 0.813 | 0.578 | 3.01 | 1.78 | 2.71 | 2.28 | 0.770 | 1.22 | 1.80 | 2.08 | 1.18 | MEAN |
| MAX | 0.883 | 0.783 | 2.58 | 5.01 | 3.08 | 4.73 | 5.30 | 1.82 | 1.88 | 1.85 | 2.58 | 1.48 | MAX |
| MIN | 0.522 | 0.535 | 0.188 | 1.00 | 1.38 | 1.42 | 0.781 | 0.384 | 0.787 | 1.42 | 1.52 | 1.01 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 1.84
MAXIMUM DAILY, 5.30 ON JUL 1
MINIMUM DAILY, 0.1888 ON MAR 14
MAXIMUM INSTANTANEOUS,
5.158 AT 10:35 CST ON APR 3

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 57 40 N
LONG 101 10 05 W
DRAINAGE AREA, 2 000 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 1 610 | JUL | 6 100 |
| FEB | 1 480 | AUG | 2 060 |
| MAR | 1 550 | SEP | 3 180 |
| APR | 7 810 | OCT | 4 280 |
| MAY | 4 780 | NOV | 5 430 |
| JUN | 7 020 | DEC | 3 180 |

TOTAL DISCHARGE, 48 500 dam³

## SHELL RIVER NEAR ROBLIN - STATION NO. 05MD007

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.2408 | 0.2408 | 1.78 | 1.05 | 4.08 | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | 0.2408 | 0.2788 | 1.63 | 0.868 | 3.67 | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | 0.2408 | 0.3248 | 1.43 | 0.677 | 3.24 | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | 0.2408 | 0.4738 | 1.28 | 0.644 | 2.87 | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | 0.2408 | 1.35 B | 1.09 | 0.648 | 2.61 | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | 0.2408 | 1.15 B | 0.968 | 0.689 | 2.33 | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | 0.2408 | 0.9458 | 0.820 | 1.10 | 2.13 | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | 0.2408 | 0.8678 | 0.713 | 1.38 | 2.08 | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | 0.2408 | 0.8418 | 0.884 | 1.48 | 2.23 | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | 0.2408 | 1.15 B | 0.873 | 1.89 | 2.23 | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | 0.2408 | 1.05 B | 0.828 | 1.71 | 2.17 | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | 0.2408 | 0.8108 | 0.584 | 1.84 | 2.21 | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | 0.2408 | 1.07 B | 0.828 | 2.09 | 2.05A | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | 0.2408 | 1.06 B | 0.898 | 2.78 | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | 0.2408 | 0.8088 | 0.715 | 3.78 | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | 0.2408 | 0.4208 | 0.878 | 4.27 | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | 0.2408 | 0.5048 | 0.687 | 4.33 | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | 0.2408 | 0.6108 | 0.588 | 3.98 | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | 0.2408 | 0.4288 | 0.610 | 3.66 | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | 0.2408 | 0.6408 | 0.592 | 3.15 | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | 0.2408 | 2.23 B | 0.611 | 2.78 | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | 0.2408 | 2.43 | 0.591 | 2.48 | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | 0.2408 | 2.68 | 0.574 | 2.23 | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | 0.2408 | 3.31 | 0.550 | 2.05 | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | 0.2408 | 3.28 | 0.681 | 1.89 | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | 0.2768 | 3.05 | 1.20 | 1.98 | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | 0.2808 | 3.03 | 1.38 | 2.12 | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | 0.2408 | 2.88 | 1.30 | 3.64 | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | 0.2408 | 3.22 | 1.40 | 5.80 | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | 0.2408 | 1.87 | 1.33 | 4.71 | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | 0.2408 | | 1.19 | | --- | | | --- | | --- | 31 |
| TOTAL | --- | --- | 7.496 | 42.296 | 28.230 | 71.958 | --- | --- | --- | --- | --- | --- | TOTAL |
| MEAN | --- | --- | 0.242 | 1.41 | 0.911 | 2.40 | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | 0.278 | 3.31 | 1.78 | 5.80 | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | 0.240 | 0.240 | 0.554 | 0.644 | --- | --- | --- | --- | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO JUN

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 1.33
MAXIMUM DAILY, 5.80 ON JUN 29
MINIMUM DAILY, 0.2408 ON MAR 1
MAXIMUM INSTANTANEOUS,
5.80 AT 09:28 CST ON JUN 29

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 21 38 N
LONG 101 15 21 W
DRAINAGE AREA, 1 330 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | --- |
| FEB | --- | AUG | --- |
| MAR | 848 | SEP | --- |
| APR | 3 650 | OCT | --- |
| MAY | 2 440 | NOV | --- |
| JUN | 6 220 | DEC | --- |

TOTAL DISCHARGE, 13 000 dam³

## SHOAL LAKE AT INDIAN BAY - STATION NO. 05PD004

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | 323.187 | --- | --- | 323.625 | 1 |
| 2 | --- | --- | --- | --- | --- | 323.580 | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | 322.811 | 322.850 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 323.741 | --- | 4 |
| 5 | --- | --- | --- | --- | 322.820 | --- | --- | 323.314 | --- | --- | --- | --- | 5 |
| 6 | 322.587 | --- | --- | --- | --- | --- | --- | --- | --- | 323.862 | --- | --- | 6 |
| 7 | --- | --- | --- | 322.777 | --- | --- | 323.387 | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | --- | --- | --- | --- | --- | --- | 323.088 | --- | --- | 322.805 | 8 |
| 9 | --- | --- | --- | --- | --- | 323.084 | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | 322.836 | 322.828 | --- | --- | --- | --- | --- | --- | --- | 322.704 | --- | 10 |
| 11 | --- | --- | --- | --- | --- | --- | --- | 323.263 | --- | --- | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 322.832 | --- | --- | --- | --- | --- | --- | --- | 12 |
| 13 | 322.715 | --- | --- | --- | --- | --- | --- | --- | --- | 322.830 | --- | --- | 13 |
| 14 | --- | --- | --- | 322.777 | --- | --- | 323.388 | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | --- | --- | --- | --- | --- | --- | 323.051 | --- | --- | 323.584 | 15 |
| 16 | --- | --- | --- | --- | --- | 323.188 | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | 322.844 | 322.814 | --- | --- | --- | --- | --- | --- | --- | 322.681 | --- | 17 |
| 18 | --- | --- | --- | --- | --- | --- | --- | 323.188 | --- | --- | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 322.875 | --- | --- | --- | --- | --- | --- | --- | 19 |
| 20 | 322.741 | --- | --- | --- | --- | --- | --- | --- | --- | 322.783 | --- | --- | 20 |
| 21 | --- | --- | --- | 322.777 | --- | --- | 323.375 | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 323.588 | 22 |
| 23 | --- | --- | --- | --- | --- | 323.247 | --- | --- | 323.307 | --- | --- | --- | 23 |
| 24 | --- | 322.856 | 322.738 | --- | --- | --- | --- | --- | --- | --- | 322.643 | --- | 24 |
| 25 | --- | --- | --- | --- | 322.631 | --- | 323.288 | 323.222 | --- | --- | --- | --- | 25 |
| 26 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 26 |
| 27 | 322.783 | --- | --- | --- | --- | --- | --- | --- | --- | 322.777 | --- | --- | 27 |
| 28 | --- | --- | --- | 322.803 | --- | --- | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | --- | --- | --- | --- | --- | --- | 323.003 | --- | --- | 322.670 | 29 |
| 30 | --- | | --- | --- | --- | 323.344 | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | --- | | --- | | --- | | | --- | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 37 20 N
LONG 95 12 30 W
DATA CONTRIBUTED BY -
GREATER WINNIPEG WATER DISTRICT

REGULATED

DRAINAGE AREA,
969 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## SHOAL LAKE AT SHOAL LAKE - STATION NO. 05MD007

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 548.725 | 548.671 | 548.638 | --- | 548.527E | 548.420 | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 548.723 | 548.662 | 548.638 | --- | 548.528E | 548.436 | --- | --- | 2 |
| 3 | --- | --- | --- | 548.652A | 548.723 | 548.657 | 548.626 | --- | 548.524E | 548.439 | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 548.711 | 548.658 | 548.627 | --- | 548.522E | 548.438 | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 548.705 | 548.658 | 548.625 | --- | 548.519E | 548.434 | --- | --- | 5 |
| 6 | --- | --- | --- | --- | 548.724 | 548.648 | 548.625 | --- | 548.517E | 548.436 | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 548.724 | 548.647 | 548.623 | --- | 548.514E | 548.437 | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 548.720 | 548.657 | 548.623 | --- | 548.510E | 548.440 | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 548.723 | 548.657 | 548.627 | --- | 548.507E | 548.428 | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 548.731 | 548.651 | 548.623 | --- | 548.504E | 548.437 | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 548.734 | 548.647 | 548.627 | --- | 548.501A | 548.433 | --- | --- | 11 |
| 12 | --- | --- | --- | 548.689A | 548.727 | 548.622 | 548.637 | --- | 548.501 | 548.427 | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 548.712 | 548.636 | 548.636 | --- | 548.497 | 548.424 | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 548.705 | 548.655 | 548.634 | --- | 548.497 | 548.422 | --- | --- | 14 |
| 15 | --- | --- | --- | --- | 548.701 | 548.656 | 548.632 | 548.528A | 548.493 | 548.408 | --- | --- | 15 |
| 16 | --- | --- | --- | --- | 548.706 | 548.656 | 548.630 | --- | 548.493 | 548.419 | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 548.705 | 548.656 | 548.625 | --- | 548.488 | 548.418 | --- | --- | 17 |
| 18 | --- | --- | --- | --- | 548.704 | 548.661 | 548.628 | --- | 548.487 | 548.427 | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 548.703 | 548.661 | 548.624 | --- | 548.483 | 548.432 | --- | --- | 19 |
| 20 | --- | --- | --- | 548.684A | 548.709 | 548.648 | 548.623 | --- | 548.478 | 548.414 | --- | --- | 20 |
| 21 | --- | --- | --- | 548.690 | 548.697 | 548.646 | 548.623 | --- | 548.478 | 548.417 | --- | --- | 21 |
| 22 | --- | --- | --- | 548.694 | 548.693A | 548.642 | 548.621 | --- | 548.482 | 548.415 | --- | --- | 22 |
| 23 | --- | --- | --- | 548.700 | 548.694A | 548.638 | 548.608 | --- | 548.477 | 548.415 | --- | --- | 23 |
| 24 | --- | --- | --- | 548.717 | 548.689A | 548.636 | 548.611 | --- | 548.467 | 548.419 | --- | --- | 24 |
| 25 | --- | --- | --- | 548.724 | 548.694A | 548.639 | 548.622 | --- | 548.458 | 548.414 | --- | --- | 25 |
| 26 | --- | --- | --- | 548.722 | 548.695A | 548.638 | 548.620E | --- | 548.461 | 548.395 | --- | --- | 26 |
| 27 | --- | --- | --- | 548.717 | 548.698A | 548.630 | 548.615E | --- | 548.454 | 548.412 | --- | --- | 27 |
| 28 | --- | --- | --- | 548.709 | 548.678E | 548.628 | 548.607E | --- | 548.448 | 548.418 | --- | --- | 28 |
| 29 | --- | | --- | 548.703 | 548.688E | 548.634 | 548.600E | --- | 548.451 | 548.417 | --- | --- | 29 |
| 30 | --- | | --- | 548.724 | 548.674A | 548.639 | 548.592E | --- | 548.445 | 548.413 | --- | --- | 30 |
| 31 | --- | | --- | | 548.671 | | 548.583E | --- | | 548.412A | | --- | 31 |
| MEAN | --- | --- | --- | --- | 548.705 | 548.648 | 548.622 | --- | 548.488 | 548.423 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 548.734 | 548.671 | 548.638 | --- | 548.527 | 548.440 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 548.689 | 548.622 | 548.583 | --- | 548.445 | 548.395 | --- | --- | MIN |

WATER LEVELS IN METRES

### SUMMARY FOR THE YEAR 1988

MAXIMUM DAILY, 548.734 ON MAY 11
MINIMUM DAILY, 548.395 ON OCT 28
MAXIMUM INSTANTANEOUS,
548.785 AT 13:10 CST ON MAY 11

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 28 02 N
LONG 100 38 55 W

A - MANUAL GAUGE
E - ESTIMATED

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1979 ADJ.)

DRAINAGE AREA,
405 km²

## SILVER CREEK NEAR GRANDVIEW - STATION NO. 05LJ040

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0.0028 | 0.086 | 0.036 | 0.188 | 0 | 0.172 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0.0038 | 0.056 | 0.021 | 0.109 | 0.002A | 0.183 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0.0038 | 0.038 | 0.017 | 0.051 | 0.004 | 0.164 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0.0048 | 0.023 | 0.010 | 0.020 | 0.004 | 0.121 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0.0088 | 0.028 | 0.005 | 0.012 | 0.002 | 0.091 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0.1388 | 0.023 | 0.008 | 0.013 | 0 | 0.104 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.1788 | 0.021 | 0.091 | 0.006 | 0 | 0.113 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.1608 | 0.018 | 0.061 | 0.047 | 0 | 0.087 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.1028 | 0.018 | 0.095 | 0.281 | 0 | 0.030 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.0818 | 0.014 | 0.088 | 0.208 | 0 | 0.018 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.0808 | 0.011 | 0.190 | 0.151 | 0 | 0.013 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.0828 | 0.012 | 0.802 | 0.515 | 0 | 0.010 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.0818 | 0.011 | 1.59 | 0.382 | 0 | 0.008 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.0808 | 0.009 | 1.85 | 0.278 | 0 | 0.006 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.0908 | 0.008 | 1.88 | 0.148 | 0 | 0.004 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.1268 | 0.008 | 1.27 | 0.073 | 0 | 0.003 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.118 | 0.005 | 0.602 | 0.034 | 0 | 0.002 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.105 | 0.005 | 0.319 | 0.021 | 0 | 0.002 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.094 | 0.005 | 0.206 | 0.030 | 0 | 0.002 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.097 | 0.008 | 0.139 | 0.032 | 0 | 0.002 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.156 | 0.005 | 0.094 | 0.022 | 0.123A | 0.002 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.098 | 0.003 | 0.075 | 0.016 | 0.137 | 0.001 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.178 | 0.002 | 0.043 | 0.011 | 0.213 | 0.001 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.258 | 0.004 | 0.022 | 0.007 | 0.138 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.208 | 0.011 | 0.015 | 0.004 | 0.148 | 0 | 0.001A | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.188 | 0.012 | 0.044 | 0.002 | 0.218 | 0 | 0.001A | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.147 | 0.008 | 0.059 | 0 | 0.188 | 0 | 0.008A | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.140 | 0.031 | 0.088 | 0 | 0.230 | 0 | 0.017 | --- | --- | 28 |
| 29 | --- | | 0B | 0.119 | 0.034 | 0.084 | 0 | 0.248 | 0 | 0.0818 | --- | --- | 29 |
| 30 | --- | | 0B | 0.103 | 0.228 | 0.181 | 0 | 0.210 | 0 | 0.1248 | --- | --- | 30 |
| 31 | --- | | 0B | | 0.088 | | 0 | 0.202 | | 0.1348 | | --- | 31 |
| TOTAL | --- | --- | 0 | 3.208 | 0.813 | 10.174 | 3.847 | 3.053 | 1.077 | 0.374 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.107 | 0.026 | 0.339 | 0.085 | 0.085 | 0.036 | 0.012 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.258 | 0.228 | 1.88 | 0.515 | 0.248 | 0.172 | 0.134 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.002 | 0.002 | 0.005 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

### SUMMARY FOR THE MONTHS MAR TO OCT

MEAN, 0.083
MAXIMUM DAILY, 1.88 ON JUN 14
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
2.18 AT 19:01 CST ON JUN 14

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 12 24 N
LONG 100 41 42 W

DRAINAGE AREA, 137 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

REGULATED

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 239 |
| FEB | --- | AUG | 177 |
| MAR | 0 | SEP | 83.1 |
| APR | 277 | OCT | 32.3 |
| MAY | 70.2 | NOV | --- |
| JUN | 879 | DEC | --- |

TOTAL DISCHARGE, 1 780 dam³

## SIPIWESK LAKE AT FORESTRY DOCK - STATION NO. 05UD009

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 185.270E | 185.281 | 185.183 | 185.174 | 185.088 | 184.843 | 184.851 | --- | --- | --- | 185.858 | 185.708 | 1 |
| 2 | 185.271E | 185.284 | 185.182 | 185.173 | 185.091 | 184.847 | 184.838 | --- | --- | --- | 185.844 | 185.718 | 2 |
| 3 | 185.273E | 185.276 | 185.178 | 185.170 | 185.087 | 184.852 | 184.813 | --- | --- | --- | 185.830 | 185.730 | 3 |
| 4 | 185.274E | 185.256 | 185.171 | 185.167 | 185.084 | 184.858 | 184.814 | --- | --- | --- | 185.833 | 185.738 | 4 |
| 5 | 185.275A | 185.251 | 185.169 | 185.163 | 185.078 | 184.852 | 184.808 | --- | --- | --- | 185.832 | 185.757 | 5 |
| 6 | 185.275 | 185.248 | 185.163 | 185.158 | 185.088 | 184.858 | 184.822 | --- | --- | --- | 185.822 | 185.768 | 6 |
| 7 | 185.277 | 185.248 | 185.138 | 185.151 | 185.078 | 184.873 | 184.822 | --- | --- | --- | 185.820 | 185.778 | 7 |
| 8 | 185.278 | 185.238 | 185.139 | 185.147 | 185.077 | 184.878 | 184.812 | --- | --- | --- | 185.821 | 185.787 | 8 |
| 9 | 185.274 | 185.236 | 185.134 | 185.138 | 185.077 | 184.872 | 184.808 | --- | --- | --- | 185.818 | 185.787 | 9 |
| 10 | 185.289 | 185.228 | 185.136 | 185.130 | 185.070 | 184.884 | 184.812A | --- | --- | 185.483A | 185.813 | 185.808 | 10 |
| 11 | 185.272 | 185.224 | 185.135 | 185.124 | 185.080 | 184.857 | --- | --- | --- | 185.471 | 185.818 | 185.811 | 11 |
| 12 | 185.260 | 185.222 | 185.143 | 185.116 | 185.051 | 184.872 | --- | --- | --- | 185.475 | 185.806 | 185.817 | 12 |
| 13 | 185.282 | 185.222 | 185.148 | 185.116 | 185.038 | 184.883 | --- | --- | --- | 185.474 | 185.804 | 185.828 | 13 |
| 14 | 185.285 | 185.218 | 185.148 | 185.107 | 185.028 | 184.888 | --- | --- | --- | 185.488 | 185.811 | 185.835 | 14 |
| 15 | 185.281 | 185.208 | 185.153 | 185.088 | 185.028 | 184.872 | --- | --- | --- | 185.500 | 185.816 | 185.843 | 15 |
| 16 | 185.285 | 185.187 | 185.151 | 185.091 | 185.011 | 184.853 | --- | --- | --- | 185.512 | 185.822 | 185.848 | 16 |
| 17 | 185.284 | 185.185 | 185.143 | 185.083 | 185.008 | 184.842 | --- | --- | --- | 185.532 | 185.834 | 185.852 | 17 |
| 18 | 185.290 | 185.178 | 185.133 | 185.073 | 185.003 | 184.858 | --- | --- | --- | 185.538 | 185.837 | 185.852 | 18 |
| 19 | 185.287 | 185.167 | 185.130 | 185.068 | 184.973 | 184.853 | --- | --- | --- | 185.530 | 185.858 | 185.853 | 19 |
| 20 | 185.284 | 185.157 | 185.127 | 185.058 | 184.985 | 184.852 | --- | --- | --- | 185.538 | 185.874 | 185.858 | 20 |
| 21 | 185.287 | 185.162 | 185.119 | 185.084 | 185.004 | 184.850 | --- | --- | --- | 185.543 | 185.882 | 185.882 | 21 |
| 22 | 185.293 | 185.162 | 185.124 | 185.070 | 184.984 | 184.848 | --- | --- | --- | 185.554 | 185.894 | 185.888 | 22 |
| 23 | 185.298 | 185.171 | 185.131 | 185.083 | 184.974 | 184.853 | --- | --- | --- | 185.574 | 185.702 | 185.870 | 23 |
| 24 | 185.292 | 185.181 | 185.143 | 185.088 | 184.953 | 184.843 | --- | --- | --- | 185.580 | 185.700 | 185.878 | 24 |
| 25 | 185.292 | 185.185 | 185.149 | 185.081 | 184.933 | 184.851 | --- | --- | --- | 185.587 | 185.897 | 185.882 | 25 |
| 26 | 185.286 | 185.186 | 185.152 | 185.080 | 184.962 | 184.848 | --- | --- | --- | 185.598 | 185.887 | 185.888 | 26 |
| 27 | 185.294 | 185.184 | 185.170 | 185.078 | 184.921 | 184.852 | --- | --- | --- | 185.596 | 185.885 | 185.892 | 27 |
| 28 | 185.297 | 185.189 | 185.174 | 185.075 | 184.913 | 184.893 | --- | --- | --- | 185.572 | 185.878 | 185.893 | 28 |
| 29 | 185.305 | | 185.181 | 185.078 | 184.880 | 184.888 | --- | --- | --- | 185.578 | 185.882 | 185.894 | 29 |
| 30 | 185.308 | | 185.180 | 185.081 | 184.873 | 184.874 | --- | --- | --- | 185.571 | 185.892 | 185.898 | 30 |
| 31 | 185.303 | | 185.178 | | 184.859 | | --- | --- | --- | 185.557 | | 185.904 | 31 |
| MEAN | 185.285 | 185.213 | 185.151 | 185.110 | 185.008 | 184.862 | --- | --- | --- | --- | 185.849 | 185.828 | MEAN |
| MAX | 185.308 | 185.281 | 185.183 | 185.174 | 185.091 | 184.893 | --- | --- | --- | --- | 185.702 | 185.904 | MAX |
| MIN | 185.269 | 185.157 | 185.119 | 185.084 | 184.859 | 184.843 | --- | --- | --- | --- | 185.804 | 185.708 | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MAXIMUM DAILY, 185.904 ON DEC 31

MAXIMUM INSTANTANEOUS,
185.904 AT 20:47 CST ON DEC 30

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (MAN. HYDRO EXT.)

TYPE OF GAUGE - RECORDING
LOCATION - LAT 55 05 40 N
LONG 97 30 00 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED

DRAINAGE AREA,
1 000 000 km²

## SIPIWESK LAKE AT SIPIWESK LANDING - STATION NO. 05UD007

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | 185.491 | 185.383 | --- | --- | --- | --- | 184.751 | 184.807 | 185.537 | 185.903 | 185.880 | 1 |
| 2 | --- | 185.487 | 185.383 | --- | --- | --- | --- | 184.778 | 184.822 | 185.524 | 185.885 | 185.868 | 2 |
| 3 | --- | 185.480 | 185.383 | --- | --- | --- | --- | 184.814 | 184.848 | 185.548 | 185.913 | 185.877 | 3 |
| 4 | --- | 185.458 | 185.384 | --- | --- | --- | --- | 184.822 | 184.834 | 185.590 | 185.900 | 185.868 | 4 |
| 5 | --- | 185.448 | 185.385 | --- | --- | --- | --- | 184.789 | 184.826 | 185.606 | 185.880 | 185.895 | 5 |
| 6 | --- | 185.449 | 185.385 | --- | --- | --- | --- | 184.728 | 184.858 | 185.648 | 185.874 | 186.009 | 6 |
| 7 | --- | 185.445 | 185.389 | --- | --- | --- | --- | 184.714 | 184.863 | 185.662 | 185.873 | 186.023 | 7 |
| 8 | --- | 185.438 | 185.386 | --- | --- | --- | --- | 184.707 | 184.862 | 185.672 | 185.885 | 186.038 | 8 |
| 9 | --- | 185.436 | 185.386 | --- | --- | --- | --- | 184.710 | 184.884 | 185.688 | 185.884 | 186.053 | 9 |
| 10 | 185.488A | 185.428 | 185.388 | --- | --- | --- | 185.022A | 184.726 | 184.906 | 185.701 | 185.870 | 186.067 | 10 |
| 11 | 185.488 | 185.431 | 185.385 | --- | --- | --- | 185.004 | 184.726 | 184.888 | 185.690 | 185.859 | 186.083 | 11 |
| 12 | 185.491 | 185.431 | 185.384 | --- | --- | --- | 186.003 | 184.778 | 184.819 | 185.698 | 185.847 | 186.088 | 12 |
| 13 | 185.492 | 185.427 | 185.385 | --- | --- | --- | 185.010 | 184.758 | 184.863 | 185.731 | 185.850 | 186.074 | 13 |
| 14 | 185.490 | 185.418 | 185.389 | --- | --- | --- | 184.987 | 184.705 | 184.882 | 185.742 | 185.851 | 186.079 | 14 |
| 15 | 185.489 | 185.405 | 185.388 | --- | --- | --- | 184.984 | 184.712 | 184.885 | 185.753 | 185.862 | 186.088 | 15 |
| 16 | 185.501 | 185.398 | 185.388 | --- | --- | --- | 184.948 | 184.708 | 184.920 | 185.758 | 185.872 | 186.093 | 16 |
| 17 | 185.502 | 185.387 | 185.388 | --- | --- | --- | 184.944 | 184.700 | 184.941 | 185.752 | 185.880 | 186.091 | 17 |
| 18 | 185.505 | 185.376 | 185.380 | --- | --- | --- | 184.914 | 184.728 | 184.922 | 185.741 | 185.883 | 186.098 | 18 |
| 19 | 185.501 | 185.388 | 185.380 | --- | --- | --- | 184.893 | 184.778 | 184.937 | 185.748 | 185.907 | 186.100 | 19 |
| 20 | 185.502 | 185.388 | --- | --- | --- | --- | 184.880 | 184.718 | 184.938 | 185.788 | 185.918 | 186.101 | 20 |
| 21 | 185.505 | 185.380 | --- | --- | --- | --- | 184.882 | 184.708 | 184.972 | 185.803 | 185.924 | 186.103 | 21 |
| 22 | 185.510 | 185.386 | --- | --- | --- | --- | 184.845 | 184.778 | 184.988 | 185.809 | 185.934 | 186.113 | 22 |
| 23 | 185.502 | 185.380 | --- | --- | 185.188A | --- | 184.843 | 184.782 | 184.988 | 185.817 | 185.938 | 186.122 | 23 |
| 24 | 185.504 | 185.390 | --- | --- | 185.195 | --- | 184.871 | 184.772 | 185.033 | 185.846 | 185.948 | 186.128 | 24 |
| 25 | 185.503 | 185.390 | --- | --- | 185.240 | --- | 184.847 | 184.788 | 185.312 | 185.828 | 185.948 | 186.128 | 25 |
| 26 | 185.504 | 185.391 | --- | --- | 185.188 | --- | 184.880 | 184.751 | 185.158 | 185.881 | 185.948 | 186.137 | 26 |
| 27 | 185.507 | 185.393 | --- | --- | 185.185 | --- | 184.840 | 184.784 | 185.200 | 185.897 | 185.930 | 186.143 | 27 |
| 28 | 185.503 | 185.384 | --- | --- | 185.123 | --- | 184.840 | 184.808 | 185.244 | 185.907 | 185.930 | 186.143 | 28 |
| 29 | 185.515 | | --- | --- | 185.062 | --- | 184.858 | 184.838 | 185.344 | 185.901 | 185.932 | 186.144 | 29 |
| 30 | 185.515 | | --- | --- | 185.095 | --- | 184.838 | 184.828 | 185.900 | 185.915 | 185.941 | 186.145 | 30 |
| 31 | 185.508 | | --- | | --- | | 184.821 | 184.828 | | 185.940 | | 186.144 | 31 |
| MEAN | --- | 185.415 | --- | --- | --- | --- | --- | 184.757 | 184.867 | 185.748 | 185.887 | 186.078 | MEAN |
| MAX | --- | 185.491 | --- | --- | --- | --- | --- | 184.838 | 185.900 | 185.892 | 185.948 | 186.145 | MAX |
| MIN | --- | 185.388 | --- | --- | --- | --- | --- | 184.700 | 184.807 | 185.524 | 185.847 | 185.880 | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MAXIMUM DAILY, 186.145 ON DEC 30
MINIMUM DAILY, 184.700 ON AUG 17
MAXIMUM INSTANTANEOUS,
186.182 AT 21:10 CST ON DEC 31

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1980 ADJ.)

TYPE OF GAUGE - RECORDING
LOCATION - LAT 54 53 00 N
LONG 98 22 00 W

A - MANUAL GAUGE

REGULATED

DRAINAGE AREA,
1 000 000 km²

## SNOW LAKE ABOVE SNOW CREEK DAM - STATION NO. 05TB802

DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 274.675 | 274.728E | 274.728E | 274.695 | 274.680E | 275.020 | 275.085 | --- | 1 |
| 2 | --- | --- | --- | --- | 274.675E | 274.725 | 274.725 | 274.695E | 274.705 | 275.030E | 275.085E | --- | 2 |
| 3 | --- | --- | --- | --- | 274.675 | 274.725E | 274.725E | 274.695 | 274.720E | 275.035 | 275.085E | --- | 3 |
| 4 | --- | --- | --- | --- | 274.675E | 274.725 | 274.725 | 274.690E | 274.735 | 275.035E | 275.085 | --- | 4 |
| 5 | --- | --- | --- | --- | 274.682E | 274.725E | 274.722E | 274.685 | 274.745E | 275.035E | 275.085E | --- | 5 |
| 6 | --- | --- | --- | --- | 274.685 | 274.725E | 274.718E | 274.685E | 274.755 | 275.035 | 275.085 | --- | 6 |
| 7 | --- | --- | --- | --- | 274.685E | 274.725 | 274.715 | 274.685 | 274.755E | 275.045E | 275.085E | --- | 7 |
| 8 | --- | --- | --- | --- | 274.685 | 274.725E | 274.715E | 274.680E | 274.775 | 275.055 | 275.085 | --- | 8 |
| 9 | --- | --- | --- | --- | 274.690E | 274.725 | 274.715E | 274.675 | 274.788E | 275.055E | 275.085E | --- | 9 |
| 10 | --- | --- | --- | --- | 274.695 | 274.725E | 274.715 | 274.670E | 274.802E | 275.062E | 275.085E | --- | 10 |
| 11 | --- | --- | --- | --- | 274.700E | 274.725E | 274.710E | 274.685 | 274.815 | 275.065 | 275.085 | --- | 11 |
| 12 | --- | --- | --- | --- | 274.705 | 274.725 | 274.705 | 274.685E | 274.825E | 275.065E | 275.085E | --- | 12 |
| 13 | --- | --- | --- | --- | 274.710E | 274.725E | 274.702E | 274.685 | 274.825E | 275.065E | 275.085 | --- | 13 |
| 14 | --- | --- | --- | --- | 274.715 | 274.725 | 274.695E | 274.685E | 274.845 | 275.065 | 275.085E | --- | 14 |
| 15 | --- | --- | --- | --- | 274.715E | 274.725E | 274.695 | 274.685E | 274.850E | 275.070E | 275.085 | --- | 15 |
| 16 | --- | --- | --- | --- | 274.715 | 274.725 | 274.685E | 274.685 | 274.875 | 275.075 | 275.085E | --- | 16 |
| 17 | --- | --- | --- | --- | 274.715E | 274.725E | 274.675 | 274.685E | 274.890E | 275.075E | 275.085 | --- | 17 |
| 18 | --- | --- | --- | --- | 274.715E | 274.725 | 274.675E | 274.685 | 274.905 | 275.075E | 275.085E | --- | 18 |
| 19 | --- | --- | --- | --- | 274.715 | 274.725E | 274.675E | 274.685E | 274.915E | 275.075 | 275.085 | --- | 19 |
| 20 | --- | --- | --- | --- | 274.630E | 274.725 | 274.675 | 274.905E | 274.925 | 275.075E | 275.085E | --- | 20 |
| 21 | --- | --- | --- | --- | 274.685 | 274.725E | 274.685E | 274.925 | 274.945E | 275.075 | 275.085E | --- | 21 |
| 22 | --- | --- | --- | --- | 274.690E | 274.725 | 274.685 | 274.925E | 274.965 | 275.075E | 275.085 | --- | 22 |
| 23 | --- | --- | --- | --- | 274.675 | 274.725E | 274.685E | 274.945 | 274.965E | 275.075 | 275.085E | --- | 23 |
| 24 | --- | --- | --- | --- | 274.675E | 274.725E | 274.685E | 274.952E | 274.972E | 275.075E | 275.085 | --- | 24 |
| 25 | --- | --- | --- | --- | 274.682E | 274.725 | 274.685 | 274.965E | 274.975 | 275.075 | --- | --- | 25 |
| 26 | --- | --- | --- | --- | 274.685 | 274.725E | 274.620E | 274.685 | 274.985E | 275.075E | --- | --- | 26 |
| 27 | --- | --- | --- | --- | 274.682E | 274.725 | 274.615 | 274.670E | 274.995 | 275.075E | --- | --- | 27 |
| 28 | --- | --- | --- | --- | 274.685E | 274.725E | 274.615E | 274.675 | 275.010E | 275.075 | --- | --- | 28 |
| 29 | --- | | 274.685 | --- | 274.705 | 274.725E | 274.615 | 274.675E | 275.025 | 275.075E | --- | --- | 29 |
| 30 | --- | | --- | --- | 274.715E | 274.725 | 274.608E | 274.675E | 275.025E | 275.075 | --- | --- | 30 |
| 31 | --- | | --- | | 274.725 | | 274.602E | 274.675 | | 275.080E | | --- | 31 |
| MEAN | --- | --- | --- | --- | 274.630 | 274.725 | 274.677 | 274.807 | 274.888 | 275.083 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 274.725 | 274.725 | 274.725 | 274.975 | 275.025 | 275.080 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 274.675 | 274.725 | 274.602 | 274.685 | 274.850 | 275.025 | --- | --- | MIN |

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - MANUAL
LOCATION - LAT 54 53 23 N
LONG 99 58 42 W

DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1972

DRAINAGE AREA,
278 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## SNOWFLAKE CREEK NEAR SNOWFLAKE - STATION NO. 05UB010

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0B | 0B | 0B | 0 B | 0.171 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2 | 0B | 0B | 0B | 0 B | 0.159 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 3 | 0B | 0B | 0B | 0 B | 0.135 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 4 | 0B | 0B | 0B | 0 B | 0.101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 5 | 0B | 0B | 0B | 0.0048 | 0.070 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 6 | 0B | 0B | 0B | 0.0039 | 0.048 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 7 | 0B | 0B | 0B | 0.0408 | 0.038 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 8 | 0B | 0B | 0B | 0.0888 | 0.031 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 9 | 0B | 0B | 0B | 0.0108 | 0.021 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 10 | 0B | 0B | 0B | 0.0888 | 0.018 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 11 | 0B | 0B | 0B | 0.0788 | 0.011 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 12 | 0B | 0B | 0B | 0.2088 | 0.008 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 13 | 0B | 0B | 0B | 0.810 | 0.007 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 14 | 0B | 0B | 0B | 3.03 | 0.007 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 15 | 0B | 0B | 0B | 3.17 | 0.006 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| 16 | 0B | 0B | 0B | 3.14 | 0.005 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 17 | 0B | 0B | 0B | 1.37 | 0.007 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 18 | 0B | 0B | 0B | 0.714 | 0.011 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 19 | 0B | 0B | 0B | 0.882 | 0.008 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 20 | 0B | 0B | 0B | 0.837 | 0.008 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| 21 | 0B | 0B | 0B | 0.674 | 0.008 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| 22 | 0B | 0B | 0B | 0.537 | 0.004 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| 23 | 0B | 0B | 0B | 1.10 | 0.006 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| 24 | 0B | 0B | 0B | 1.80 | 0.008 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 25 | 0B | 0B | 0B | 1.28 | 0.006 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 |
| 26 | 0B | 0B | 0B | 0.830 | 0.008 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| 27 | 0B | 0B | 0B | 0.476 | 0.004 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 |
| 28 | 0B | 0B | 0B | 0.282 | 0.006 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| 29 | 0B | | 0B | 0.187 | 0.004 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| 30 | 0B | | 0B | 0.143 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 |
| 31 | 0B | | 0B | | 0.002 | | 0 | 0 | | 0 | | 0 | 31 |
| TOTAL | 0 | 0 | 0 | 30.731 | 0.808 | 0.009 | 0 | 0 | 0 | 0 | 0 | 0 | TOTAL |
| MEAN | 0 | 0 | 0 | 0.991 | 0.028 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | MEAN |
| MAX | 0 | 0 | 0 | 3.17 | 0.171 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | MAX |
| MIN | 0 | 0 | 0 | 0 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.089
MAXIMUM DAILY, 3.17 ON APR 15
MINIMUM DAILY, 0B ON JAN 1
MAXIMUM INSTANTANEOUS,
8.33 AT 17:19 CST ON APR 14

SUMMARY FOR THE YEAR 1989

INTERNATIONAL GAUGING STATION
TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 01 17 N
LONG 95 39 17 W

DRAINAGE AREA, 981 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 0 | JUL | 0 |
| FEB | 0 | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 1 780 | OCT | 0 |
| MAY | 78.5 | NOV | 0 |
| JUN | 0.78 | DEC | 0 |

TOTAL DISCHARGE, 1 870 dam³

## SOURIS RIVER ABOVE HARTNEY DAM - STATION NO. 05NE005

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | 419.895 | --- | 420.383E | 420.180 | 419.735E | 419.837E | 419.580E | 419.870 | 419.883E | 419.630 | --- | 1 |
| 2 | --- | --- | --- | 420.550 | 420.175E | 419.730 | 419.843E | 419.580 | 419.870E | 419.870 | 419.828E | --- | 2 |
| 3 | --- | --- | --- | 420.610 | 420.170 | 419.700E | 419.850 | 419.838E | 419.870E | 419.875E | 419.826 | --- | 3 |
| 4 | 419.884 | --- | --- | 420.680 | 420.135E | 419.670E | 419.845E | 419.820 | 419.870 | 419.880 | 419.832E | --- | 4 |
| 5 | --- | --- | --- | 420.650 | 420.100 | 419.640 | 419.840 | 419.817E | 419.874 | 419.880E | 419.836E | --- | 5 |
| 6 | --- | --- | --- | 420.780 | 420.123E | 419.810E | 419.830E | 419.813E | 419.870 | 419.880 | 419.840 | --- | 6 |
| 7 | --- | --- | --- | 420.820 | 420.147E | 419.880 | 419.820 | 419.810 | 419.880 | 419.881E | 419.840E | --- | 7 |
| 8 | --- | --- | --- | 421.060 | 420.170 | 419.880E | 419.817E | 419.819E | 419.880 | 419.883E | 419.840 | --- | 8 |
| 9 | --- | --- | --- | 421.200 | 420.170E | 419.840 | 419.813E | 419.810 | 419.883E | 419.883E | 419.836E | --- | 9 |
| 10 | --- | --- | --- | 421.210 | 420.170 | 419.883E | 419.810 | 419.805E | 419.867E | 419.884E | 419.830 | --- | 10 |
| 11 | --- | --- | --- | 421.240 | 420.175E | 419.847E | 419.805E | 419.800 | 419.870 | 419.885E | 419.830E | --- | 11 |
| 12 | --- | --- | --- | 421.220 | 420.180 | 419.700 | 419.800 | 419.810E | 419.870E | 419.885E | 419.830E | --- | 12 |
| 13 | --- | --- | --- | 421.200 | 420.187E | 419.770E | 419.810E | 419.820E | 419.870 | 419.887E | 419.830 | --- | 13 |
| 14 | --- | --- | --- | 421.140 | 420.193E | 419.840 | 419.880 | 419.830 | 419.870E | 419.888E | 419.825E | --- | 14 |
| 15 | --- | --- | --- | 421.100 | 420.200 | 419.855E | 419.863E | 419.825E | 419.870 | 419.889E | 419.820 | --- | 15 |
| 16 | --- | --- | --- | 421.020 | 420.175E | 419.870 | 419.867E | 419.820 | 419.867E | 419.880 | 419.820E | --- | 16 |
| 17 | --- | --- | --- | 420.940 | 420.150 | 419.880E | 419.880 | 419.830E | 419.843E | 419.890E | 419.820 | --- | 17 |
| 18 | --- | --- | --- | 420.880 | 420.140E | 419.890E | 419.895E | 419.840 | 419.843E | 419.880 | --- | --- | 18 |
| 19 | --- | --- | --- | 420.780 | 420.130 | 419.900 | 419.900 | 419.837E | 419.830E | 419.885E | --- | --- | 19 |
| 20 | --- | --- | --- | 420.700 | 420.123E | 419.910 | 419.900E | 419.833E | 419.830 | 419.880 | --- | --- | 20 |
| 21 | --- | 419.889 | --- | 420.650 | 420.117E | 419.900 | 419.900 | 419.830 | 419.838E | 419.880E | --- | --- | 21 |
| 22 | --- | --- | --- | 420.587E | 420.110 | 419.900E | 419.900E | 419.835E | 419.840 | 419.880E | --- | --- | 22 |
| 23 | --- | --- | --- | 420.543E | 420.110E | 419.900 | 419.900E | 419.840 | 419.843E | 419.880 | --- | --- | 23 |
| 24 | --- | --- | --- | 420.490 | 420.110 | 419.893E | 419.900 | 419.850E | 419.847E | 419.880E | --- | --- | 24 |
| 25 | --- | --- | --- | 420.425E | 420.110E | 419.887E | 419.885E | 419.850 | 419.850 | 419.880 | --- | --- | 25 |
| 26 | --- | --- | --- | 420.380 | 420.110 | 419.880 | 419.870 | 419.880E | 419.840E | 419.835E | --- | --- | 26 |
| 27 | --- | --- | --- | 420.310E | 420.000E | 419.880E | 419.885E | 419.880E | 419.830 | 419.830 | --- | --- | 27 |
| 28 | --- | --- | --- | 420.250 | 419.880E | 419.900 | 419.880 | 419.880 | 419.840E | 419.833E | --- | --- | 28 |
| 29 | --- | | 419.815 | 420.233E | 419.780 | 419.915E | 419.857E | 419.885E | 419.850 | 419.837E | --- | --- | 29 |
| 30 | --- | | 419.850 | 420.207E | 419.780E | 419.930 | 419.863E | 419.870 | 419.857E | 419.840 | --- | --- | 30 |
| 31 | --- | | 420.157E | | 419.740 | | 419.850 | 419.870E | | 419.835E | | --- | 31 |
| MEAN | --- | --- | --- | 420.784 | 420.088 | 419.787 | 419.889 | 419.834 | 419.885 | 419.871 | --- | --- | MEAN |
| MAX | --- | --- | --- | 421.240 | 420.200 | 419.930 | 419.950 | 419.870 | 419.878 | 419.890 | --- | --- | MAX |
| MIN | --- | --- | --- | 420.207 | 419.740 | 419.640 | 419.850 | 419.800 | 419.830 | 419.830 | --- | --- | MIN |

WATER LEVELS IN METRES

MAXIMUM DAILY, 421.240 ON APR 11

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 39 39 N
LONG 100 31 30 W

E - ESTIMATED

REGULATED SINCE 1941

DRAINAGE AREA,
63 000 km²

## SOURIS RIVER AT SOURIS - STATION NO. 05NE021

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.0778 | 0.411B | 3.02 | 0.878 | 0.588 | 0.738 | 0.408 | 0.431 | --- | --- | 1 |
| 2 | --- | --- | 0.0878 | 5.31 B | 2.78 | 0.711 | 0.748 | 0.682 | 0.382 | 0.462 | --- | --- | 2 |
| 3 | --- | --- | 0.0708 | 31.0 B | 2.67 | 0.840 | 1.05 | 0.836 | 0.833 | 0.608 | --- | --- | 3 |
| 4 | --- | --- | 0.0708 | 53.1 B | 2.52 | 0.810 | 1.04 | 0.886 | 0.889 | 0.559 | --- | --- | 4 |
| 5 | --- | --- | 0.0858 | 48.3 B | 1.84 | 0.823 | 0.878 | 0.800 | 0.481 | 0.588 | --- | --- | 5 |
| 6 | --- | --- | 0.0858 | 42.2 B | 1.40 | 0.804 | 0.823 | 0.888 | 0.427 | 0.522 | --- | --- | 6 |
| 7 | --- | --- | 0.0858 | 43.6 B | 1.48 | 0.887 | 0.858 | 0.477 | 0.448 | 0.528 | --- | --- | 7 |
| 8 | --- | --- | 0.0858 | 47.1 B | 2.03 | 0.848 | 0.803 | 0.402 | 0.488 | 0.584 | --- | --- | 8 |
| 9 | --- | --- | 0.0858 | 48.9 B | 2.40 | 0.424 | 0.878 | 0.341 | 0.444 | 0.833 | --- | --- | 9 |
| 10 | --- | --- | 0.0858 | 46.3 B | 2.51 | 0.438 | 0.803 | 0.288 | 0.418 | 0.878 | --- | --- | 10 |
| 11 | --- | --- | 0.0808 | 47.8 | 2.32 | 0.822 | 0.813 | 0.388 | 0.477 | 0.730 | --- | --- | 11 |
| 12 | --- | --- | 0.0808 | 47.2 | 2.24 | 0.488 | 0.408 | 0.348 | 0.477 | 0.710 | --- | --- | 12 |
| 13 | --- | --- | 0.0808 | 46.7 | 2.43 | 0.382 | 0.388 | 0.383 | 0.488 | 0.706 | --- | --- | 13 |
| 14 | --- | --- | 0.0888 | 44.7 | 2.45 | 0.387 | 0.385 | 0.377 | 0.448 | 0.878 | --- | --- | 14 |
| 15 | --- | --- | 0.0888 | 41.9 | 2.88 | 0.133 | 0.338 | 0.387 | 0.184 | 0.888 | --- | --- | 15 |
| 16 | --- | --- | 0.0708 | 38.0 | 2.71 | 0.240 | 0.387 | 0.302 | 0.408 | 0.888 | --- | --- | 16 |
| 17 | --- | --- | 0.0708 | 34.8 | 2.37 | 0.578 | 0.407 | 0.324 | 0.481 | 0.888 | --- | --- | 17 |
| 18 | --- | --- | 0.0708 | 31.0 | 1.81 | 0.811 | 0.388 | 0.487 | 0.388 | 0.880 | --- | --- | 18 |
| 19 | --- | --- | 0.0858 | 28.4 | 1.70 | 0.881 | 0.381 | 0.389 | 0.488 | 0.784 | --- | --- | 19 |
| 20 | --- | --- | 0.0858 | 33.1 | 1.88 | 0.818 | 0.288 | 0.382 | 0.807 | 0.788 | --- | --- | 20 |
| 21 | --- | --- | 0.0588 | 20.2 | 1.58 | 0.835 | 0.238 | 0.300 | 0.488 | 0.832 | --- | --- | 21 |
| 22 | --- | --- | 0.0588 | 18.3 | 1.48 | 0.878 | 0.410 | 0.328 | 0.381 | 0.818 | --- | --- | 22 |
| 23 | --- | --- | 0.0588 | 16.1 | 1.41 | 0.818 | 0.478 | 0.302 | 0.384 | 0.804 | --- | --- | 23 |
| 24 | --- | --- | 0.0588 | 13.8 | 1.48 | 0.806 | 0.487 | 0.288 | 0.439 | 0.802 | --- | --- | 24 |
| 25 | --- | --- | 0.1008 | 11.3 | 1.58 | 0.485 | 0.320 | 0.480 | 0.380 | 0.894 | --- | --- | 25 |
| 26 | --- | --- | 0.1288 | 8.88 | 1.48 | 0.884 | 0.800 | 0.418 | 0.404 | 0.848 | --- | --- | 26 |
| 27 | --- | --- | 0.1108 | 7.32 | 1.37 | 0.823 | 0.881 | 0.338 | 0.433 | 0.873 | --- | --- | 27 |
| 28 | --- | --- | 0.1308 | 8.74 | 1.42 | 0.880 | 0.787 | 0.418 | 0.424 | 0.802 | --- | --- | 28 |
| 29 | --- | | 0.1358 | 4.37 | 1.38 | 0.882 | 0.808 | 0.388 | 0.388 | 0.744 | --- | --- | 29 |
| 30 | --- | | 0.1408 | 3.83 | 0.823 | 0.481 | 0.774 | 0.418 | 0.427 | 0.783 | --- | --- | 30 |
| 31 | --- | | 0.1588 | | 0.787 | | 0.873 | 0.428 | | 0.884 | | --- | 31 |
| TOTAL | --- | --- | 3.458 | 888.741 | 80.480 | 18.842 | 18.327 | 12.881 | 13.443 | 22.328 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.078 | 28.8 | 1.88 | 0.621 | 0.588 | 0.408 | 0.448 | 0.717 | --- | --- | MEAN |
| MAX | --- | --- | 0.158 | 53.1 | 3.02 | 0.711 | 1.05 | 0.738 | 0.833 | 0.873 | --- | --- | MAX |
| MIN | --- | --- | 0.058 | 0.411 | 0.787 | 0.133 | 0.238 | 0.248 | 0.383 | 0.431 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 4.08
MAXIMUM DAILY, 53.18 ON APR 4
MINIMUM DAILY, 0.0588 ON MAR 14
MAXIMUM INSTANTANEOUS,
57.08 AT 01:12 CST ON APR 4

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 37 10 N
LONG 100 18 00 W
DRAINAGE AREA, 88 700 km²

B - ICE CONDITIONS

REGULATED

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 1 870 |
| FEB | --- | AUG | 1 080 |
| MAR | 213 | SEP | 1 160 |
| APR | 74 000 | OCT | 1 930 |
| MAY | 8 320 | NOV | --- |
| JUN | 1 350 | DEC | --- |

TOTAL DISCHARGE, 88 800 dam³

## SOURIS RIVER AT WAWANESA - STATION NO. 05NG001

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.1120 | 0.0880 | 0.0170 | 0.1960 | 5.31 | 1.22 | 0.654 | 0.824 | 0.135 | 0.274 | 0.722 | 0.3180 | 1 |
| 2 | 0.1300 | 0.0940 | 0.0170 | 2.67 B | 4.83 | 0.984 | 0.624 | 0.661 | 0.182 | 0.278 | 0.634 | 0.2820 | 2 |
| 3 | 0.1170 | 0.0820 | 0.0180 | 30.6 B | 4.07 | 0.745 | 0.428 | 0.648 | 0.228 | 0.287 | 0.578 | 0.2428 | 3 |
| 4 | 0.1060 | 0.0880 | 0.0180 | 84.3 B | 3.78 | 0.606 | 0.378 | 0.632 | 0.261 | 0.388 | 0.611 | 0.2648 | 4 |
| 5 | 0.0980 | 0.0860 | 0.0160 | 102 B | 3.58 | 0.575 | 0.385 | 0.634 | 0.268 | 0.327 | 0.881 | 0.3348 | 5 |
| 6 | 0.1180 | 0.0820 | 0.0140 | 77.6 B | 3.40 | 0.546 | 0.328 | 0.678 | 0.310 | 0.300 | 0.801 | 0.2748 | 6 |
| 7 | 0.1170 | 0.0800 | 0.0140 | 80.5 B | 3.00 | 0.678 | 0.387 | 0.632 | 0.324 | 0.287 | 0.678 | 0.3278 | 7 |
| 8 | 0.1110 | 0.0780 | 0.0140 | 82.6 B | 2.88 | 0.622 | 0.700 | 0.602 | 0.331 | 0.285 | 0.641 | 0.3208 | 8 |
| 9 | 0.1300 | 0.0740 | 0.0140 | 85.3 B | 2.84 | 0.803 | 0.832 | 0.338 | 0.343 | 0.453 | 0.648 | 0.2388 | 9 |
| 10 | 0.1130 | 0.0720 | 0.0140 | 87.6 B | 2.91 | 0.808 | 0.583 | 0.290 | 0.320 | 0.480 | 0.884 | 0.2178 | 10 |
| 11 | 0.1130 | 0.0880 | 0.0120 | 82.0 | 3.33 | 0.421 | 0.524 | 0.250 | 0.388 | 0.438 | 0.8458 | 0.1888 | 11 |
| 12 | 0.1048 | 0.0888 | 0.0120 | 83.4 | 3.18 | 0.402 | 0.473 | 0.288 | 0.373 | 0.412 | 0.8828 | 0.1888 | 12 |
| 13 | 0.1108 | 0.0828 | 0.0120 | 88.4 | 3.03 | 0.483 | 0.413 | 0.408 | 0.388 | 0.481 | 0.5888 | 0.1248 | 13 |
| 14 | 0.1048 | 0.0808 | 0.0088 | 93.7 | 2.98 | 0.800 | 0.384 | 0.442 | 0.377 | 0.804 | 0.8848 | 0.0838 | 14 |
| 15 | 0.1088 | 0.0888 | 0.0108 | 90.4 | 3.04 | 0.488 | 0.358 | 0.333 | 0.395 | 0.845 | 0.4828 | 0.0788 | 15 |
| 16 | 0.1188 | 0.0848 | 0.0188 | 48.8 | 3.41 | 0.484 | 0.333 | 0.278 | 0.343 | 0.887 | 0.4848 | 0.0888 | 16 |
| 17 | 0.1278 | 0.0808 | 0.0188 | 41.7 | 3.81 | 0.418 | 0.314 | 0.264 | 0.317 | 0.892 | 0.4488 | 0.0888 | 17 |
| 18 | 0.1208 | 0.0488 | 0.0178 | 37.8 | 3.37 | 0.408 | 0.288 | 0.374 | 0.288 | 0.803 | 0.4008 | 0.0818 | 18 |
| 19 | 0.1158 | 0.0448 | 0.0148 | 33.2 | 3.81 | 0.373 | 0.121 | 0.271 | 0.271 | 0.818 | 0.4888 | 0.0388 | 19 |
| 20 | 0.1268 | 0.0428 | 0.0138 | 28.1 | 3.42 | 0.388 | 0.841 | 0.208 | 0.278 | 0.850 | 0.5288 | 0.0288 | 20 |
| 21 | 0.1188 | 0.0408 | 0.0088 | 26.3 | 3.03 | 0.234 | 0.184 | 0.148A | 0.288 | 0.871 | 0.4828 | 0.0308 | 21 |
| 22 | 0.1108 | 0.0368 | 0.0088 | 22.7 | 1.88 | 0.208 | 0.188 | 0.140E | 0.243 | 0.888 | 0.4338 | 0.0288 | 22 |
| 23 | 0.1088 | 0.0348 | 0.0098 | 21.0 | 1.73 | 0.280 | 0.121 | 0.180E | 0.248 | 0.888 | 0.3778 | 0.0278 | 23 |
| 24 | 0.1108 | 0.0308 | 0.0108 | 19.5 | 1.73 | 0.432 | 0.182 | 0.180E | 0.274 | 0.735 | 0.4038 | 0.0288 | 24 |
| 25 | 0.1018 | 0.0288 | 0.0388 | 18.9 | 1.71 | 0.484 | 0.184 | 0.200A | 0.278 | 0.810 | 0.3908 | 0.0288 | 25 |
| 26 | 0.0888 | 0.0248 | 0.0818 | 13.8 | 1.72 | 0.448 | 0.184 | 0.217 | 0.334 | 0.782 | 0.4088 | 0.0248 | 26 |
| 27 | 0.0888 | 0.0228 | 0.0828 | 10.8 | 1.88 | 0.478 | 0.180 | 0.223 | 0.337 | 0.808 | 0.4078 | 0.0238 | 27 |
| 28 | 0.0868 | 0.0188 | 0.0868 | 8.14 | 1.58 | 0.480 | 0.147 | 0.187 | 0.320 | 0.788 | 0.3388 | 0.0228 | 28 |
| 29 | 0.0868 | | 0.0818 | 7.78 | 1.40 | 0.603 | 0.148 | 0.111 | 0.288 | 0.803 | 0.3288 | 0.0208 | 29 |
| 30 | 0.0878 | | 0.0888 | 8.41 | 1.35 | 0.485 | 0.284 | 0.127 | 0.348 | 0.838 | 0.3388 | 0.0188 | 30 |
| 31 | 0.1008 | | 0.0828 | | 1.47 | | 0.481 | 0.088 | | 0.830 | | 0.0188 | 31 |
| TOTAL | 3.422 | 1.824 | 0.880 | 1 186.708 | 84.70 | 15.307 | 10.328 | 9.868 | 8.832 | 17.185 | 17.438 | 3.770 | TOTAL |
| MEAN | 0.110 | 0.068 | 0.028 | 38.8 | 2.73 | 0.510 | 0.333 | 0.312 | 0.294 | 0.554 | 0.581 | 0.122 | MEAN |
| MAX | 0.130 | 0.094 | 0.085 | 102 | 5.31 | 1.22 | 0.700 | 0.848 | 0.377 | 0.838 | 0.848 | 0.334 | MAX |
| MIN | 0.088 | 0.018 | 0.008 | 0.198 | 1.35 | 0.308 | 0.041 | 0.088 | 0.138 | 0.287 | 0.328 | 0.018 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 3.84
MAXIMUM DAILY, 1028 ON APR 5
MINIMUM DAILY, 0.0068 ON MAR 14
MAXIMUM INSTANTANEOUS,
1288 AT 01:55 CST ON APR 5

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 38 05 N
LONG 99 40 55 W
DRAINAGE AREA, 81 100 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
REGULATED

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 288 | JUL | 883 |
| FEB | 140 | AUG | 837 |
| MAR | 78.8 | SEP | 783 |
| APR | 98 800 | OCT | 1 480 |
| MAY | 7 320 | NOV | 1 510 |
| JUN | 1 330 | DEC | 328 |

TOTAL DISCHARGE, 115 000 dam³

## SOURIS RIVER NEAR COULTER - STATION NO. 05NF018

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0B | 0B | 0B | 0 B | 1.57 | 0.691 | 0.808 | 0.803 | 0.687 | 0.617 | 0.713 | 0.0138 | 1 |
| 2 | 0B | 0B | 0B | 0.0368 | 1.58 | 0.686 | 0.723 | 0.808 | 0.644 | 0.780 | 1.02 | 0.0108 | 2 |
| 3 | 0B | 0B | 0B | 4.48 B | 1.61 | 0.884 | 0.730 | 0.788 | 0.674 | 0.784 | 0.836 | 0.0088 | 3 |
| 4 | 0B | 0B | 0B | 14.0 B | 2.18 | 0.887 | 0.631 | 0.772 | 0.617 | 0.748 | 0.802 | 0.0088 | 4 |
| 5 | 0B | 0B | 0B | 33.5 B | 2.47 | 0.848 | 0.784 | 0.888 | 0.613 | 0.888 | 0.834 | 0.0088 | 5 |
| 6 | 0B | 0B | 0B | 37.3 B | 2.48 | 0.730 | 0.834 | 0.738 | 0.888 | 0.727 | 0.847 | 0.0088 | 6 |
| 7 | 0B | 0B | 0B | 38.1 B | 2.20 | 0.831 | 0.889 | 0.802 | 0.843 | 0.743 | 0.672 | 0.0088 | 7 |
| 8 | 0B | 0B | 0B | 33.8 B | 2.33 | 0.781 | 1.04 | 0.813 | 0.887 | 0.741 | 0.387 | 0.0038 | 8 |
| 9 | 0B | 0B | 0B | 36.8 B | 2.38 | 0.811 | 1.13 | 0.814 | 0.840 | 0.810 | 0.838 | 0 B | 9 |
| 10 | 0B | 0B | 0B | 37.5 | 3.08 | 0.884 | 1.21 | 0.773 | 0.888 | 0.813 | 0.837 | 0 B | 10 |
| 11 | 0B | 0B | 0B | 35.5 | 3.19 | 0.888 | 1.34 | 0.787 | 0.870 | 0.707 | 0.880 | 0 B | 11 |
| 12 | 0B | 0B | 0B | 33.7 | 2.77 | 0.388 | 1.40 | 0.718 | 0.878 | 0.840 | 0.835 | 0 B | 12 |
| 13 | 0B | 0B | 0B | 30.8 | 1.83 | 0.844 | 1.48 | 0.888 | 0.741 | 0.832 | 0.880 | 0 B | 13 |
| 14 | 0B | 0B | 0B | 28.5 | 1.35 | 0.748 | 1.52 | 0.718 | 0.740 | 0.874 | 0.882 | 0 B | 14 |
| 15 | 0B | 0B | 0B | 24.9 | 1.41 | 0.838 | 1.58 | 0.778 | 0.782 | 0.728 | 0.4108 | 0 B | 15 |
| 16 | 0B | 0B | 0B | 20.5 | 1.58 | 0.808 | 1.85 | 0.784 | 0.880 | 0.888 | 0.2488 | 0 B | 16 |
| 17 | 0B | 0B | 0B | 18.6 | 1.82 | 0.483 | 1.50 | 0.787 | 0.887 | 0.834 | 0.1708 | 0 B | 17 |
| 18 | 0B | 0B | 0B | 16.8 | 1.88 | 0.538 | 1.44 | 0.870 | 0.843 | 0.888 | 0.1288 | 0 B | 18 |
| 19 | 0B | 0B | 0B | 15.4 | 1.87 | 0.828 | 1.44 | 0.814 | 0.851 | 0.818 | 0.1118 | 0 B | 19 |
| 20 | 0B | 0B | 0B | 13.8 | 1.84 | 0.888 | 1.47 | 0.834 | 0.881 | 0.803 | 0.0948 | 0 B | 20 |
| 21 | 0B | 0B | 0B | 10.4 | 1.88 | 0.708 | 1.41 | 0.881 | 0.883 | 0.881 | 0.0738 | 0 B | 21 |
| 22 | 0B | 0B | 0B | 7.70 | 1.87 | 0.730 | 1.28 | 0.883 | 0.818 | 0.883 | 0.0888 | 0 B | 22 |
| 23 | 0B | 0B | 0B | 6.00 | 1.72 | 0.763 | 1.08 | 0.880 | 0.824 | 0.782 | 0.0498 | 0 B | 23 |
| 24 | 0B | 0B | 0B | 5.27 | 1.61 | 0.786 | 1.00 | 0.873 | 0.818 | 0.739 | 0.0448 | 0 B | 24 |
| 25 | 0B | 0B | 0B | 3.87 | 1.30 | 0.800 | 0.930 | 0.878 | 0.888 | 0.888 | 0.0338 | 0 B | 25 |
| 26 | 0B | 0B | 0B | 1.73 | 0.884 | 0.787 | 0.818 | 0.487 | 0.840 | 0.881 | 0.0288 | 0 B | 26 |
| 27 | 0B | 0B | 0B | 1.88 | 0.741 | 0.738 | 0.718 | 0.804 | 0.838 | 1.00 | 0.0238 | 0 B | 27 |
| 28 | 0B | 0B | 0B | 1.83 | 0.430 | 0.784 | 0.848 | 0.841 | 0.818 | 0.812 | 0.0238 | 0 B | 28 |
| 29 | 0B | | 0B | 1.87 | 0.848 | 0.844 | 0.883 | 0.834 | 0.788 | 0.748 | 0.0138 | 0 B | 29 |
| 30 | 0B | | 0B | 1.88 | 0.851 | 0.883 | 0.870 | 0.888 | 0.888 | 0.778 | 0.0138 | 0 B | 30 |
| 31 | 0B | | 0B | | 0.721 | | 0.870 | 0.836 | | 0.847 | | 0 B | 31 |
| TOTAL | 0 | 0 | 0 | 483.388 | 52.888 | 30.881 | 33.378 | 31.034 | 30.104 | 33.883 | 10.411 | 0.083 | TOTAL |
| MEAN | 0 | 0 | 0 | 16.1 | 1.70 | 0.885 | 1.08 | 0.878 | 0.870 | 0.784 | 0.347 | 0.002 | MEAN |
| MAX | 0 | 0 | 0 | 37.8 | 3.18 | 0.811 | 1.88 | 0.814 | 0.834 | 1.00 | 1.02 | 0.013 | MAX |
| MIN | 0 | 0 | 0 | 0 | 0.430 | 0.388 | 0.870 | 0.487 | 0.818 | 0.417 | 0.013 | 0 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 1.62
MAXIMUM DAILY, 37.5 ON APR 10
MINIMUM DAILY, 0B ON JAN 1
MAXIMUM INSTANTANEOUS,
38.78 AT 23:30 CST ON APR 9

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 05 27 N
LONG 100 57 13 W
DRAINAGE AREA, 44 000 km²
B - ICE CONDITIONS
REGULATED

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 0 | JUL | 2 880 |
| FEB | 0 | AUG | 1 820 |
| MAR | 0 | SEP | 1 740 |
| APR | 41 800 | OCT | 2 080 |
| MAY | 4 840 | NOV | 900 |
| JUN | 1 780 | DEC | 8.44 |

TOTAL DISCHARGE, 57 800 dam³

## SOURIS RIVER NEAR MELITA (PTH NO. 3) - STATION NO. 05NP003

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | 428.880 | --- | --- | 428.867 | 428.788E | --- | 428.812E | 428.824 | --- | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 428.248E | 428.748 | --- | 428.815 | 428.824E | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | 428.843 | 428.748E | --- | 428.812E | 428.823E | --- | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 428.481E | 428.748E | --- | 428.808 | 428.823E | --- | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 428.458 | 428.748 | --- | 428.809E | 428.823E | --- | --- | --- | 5 |
| 6 | --- | --- | --- | --- | --- | 428.484E | 428.742E | --- | 428.809E | 428.823E | --- | --- | 6 |
| 7 | --- | --- | --- | 427.723 | 428.470E | 428.738 | --- | 428.809E | 428.822E | --- | --- | --- | 7 |
| 8 | --- | --- | --- | 427.732 | 428.474 | 428.742E | --- | 428.809 | 428.822E | --- | --- | --- | 8 |
| 9 | --- | --- | --- | 427.801 | 428.468E | 428.748 | --- | 428.809E | 428.822E | --- | --- | --- | 9 |
| 10 | --- | --- | --- | 427.891E | 428.801 | 428.783E | --- | 428.809 | 428.821E | --- | --- | --- | 10 |
| 11 | --- | --- | --- | 427.381 | 428.488E | 428.781E | --- | 428.813E | 428.821 | --- | --- | --- | 11 |
| 12 | --- | --- | --- | 427.272 | 428.488 | 428.788 | 428.813 | 428.818E | 428.824E | --- | --- | --- | 12 |
| 13 | --- | --- | --- | 427.186 | 428.471E | 428.788E | 428.821E | 428.818E | 428.827 | --- | --- | --- | 13 |
| 14 | --- | --- | --- | 427.016 | 428.468E | 428.783 | 428.830E | 428.821 | 428.827E | --- | --- | --- | 14 |
| 15 | --- | --- | --- | 426.843E | 428.418 | 428.788E | 428.838E | 428.818E | 428.827 | --- | --- | --- | 15 |
| 16 | --- | --- | --- | 426.870E | 428.420E | 428.788 | 428.848E | 428.815 | 428.828E | --- | --- | --- | 16 |
| 17 | --- | --- | --- | 426.487 | 428.422 | 428.787E | 428.857 | 428.818E | 428.828E | --- | --- | --- | 17 |
| 18 | --- | --- | --- | 426.333 | 428.428E | 428.788E | 428.853E | 428.816 | 428.824 | --- | --- | --- | 18 |
| 19 | --- | --- | --- | 426.188 | 428.426 | 428.783 | 428.864 | 428.819E | 428.828E | --- | --- | --- | 19 |
| 20 | --- | --- | --- | 426.128 | 428.428E | 428.788E | 428.847E | 428.818E | 428.827 | --- | --- | --- | 20 |
| 21 | --- | 428.848 | --- | 426.018 | 428.441E | 428.808 | 428.848E | 428.817E | 428.827E | --- | --- | --- | 21 |
| 22 | --- | --- | --- | 425.780E | 428.448E | 428.808E | 428.844E | 428.818E | 428.827 | --- | --- | --- | 22 |
| 23 | --- | --- | --- | 426.368 | 428.465 | 428.812 | 428.843E | 428.818E | --- | --- | --- | --- | 23 |
| 24 | --- | --- | --- | 426.448 | 428.528E | 428.818E | 428.843E | 428.819E | --- | --- | --- | --- | 24 |
| 25 | --- | --- | --- | 426.381E | 428.801 | 428.824E | 428.840E | 428.830E | --- | --- | --- | --- | 25 |
| 26 | --- | --- | --- | 428.183 | 428.880E | 428.830 | 428.838 | 428.821E | --- | --- | --- | --- | 26 |
| 27 | --- | --- | --- | 426.128E | 428.888E | 428.824E | 428.838E | 428.822E | --- | --- | --- | --- | 27 |
| 28 | --- | --- | --- | 426.088 | 428.768E | 428.818 | 428.833 | 428.823E | --- | --- | --- | --- | 28 |
| 29 | --- | | --- | 426.081E | 428.788 | 428.824E | 428.828E | 428.823E | --- | --- | --- | --- | 29 |
| 30 | --- | | --- | 426.084E | 428.781E | 428.830 | 428.817E | 428.824 | --- | --- | --- | --- | 30 |
| 31 | --- | | --- | | 428.788 | | 428.809 | 428.824E | | | | | 31 |
| MEAN | --- | --- | --- | --- | 428.487 | 428.787 | --- | 428.818 | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 428.784 | 428.830 | --- | 428.824 | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 428.047 | 428.738 | --- | 428.809 | --- | --- | --- | --- | MIN |

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 15 59 N
LONG 100 58 15 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1937

DRAINAGE AREA -
49 000 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## SOURIS RIVER NEAR WESTHOPE - STATION NO. 05NP012

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0.0888 | 1.78 | 0.888 | 0.848 | 0.708 | 0.851 | 0.880 | 0.738 | 0.008 | 1 |
| 2 | 0 | 0 | 0 | 0.8488 | 1.78 | 0.838 | 0.878 | 0.708 | 0.851 | 0.880 | 0.708 | 0.008 | 2 |
| 3 | 0 | 0 | 0 | 5.98 | 2.12 | 0.888 | 0.878 | 0.708 | 0.851 | 0.708 | 0.518 | 0.007 | 3 |
| 4 | 0 | 0 | 0 | 14.3 E | 2.48 | 0.888 | 0.908 | 0.708 | 0.823 | 0.738 | 0.518 | 0.008 | 4 |
| 5 | 0 | 0 | 0 | 24.1 E | 2.61 | 0.888 | 0.878 | 0.880 | 0.888 | 0.708 | 0.481 | 0.008 | 5 |
| 6 | 0 | 0 | 0 | 34.0 E | 2.58 | 0.888 | 0.908 | 0.880 | 0.888 | 0.708 | 0.481 | 0.008 | 6 |
| 7 | 0 | 0 | 0 | 38.8 E | 2.58 | 0.888 | 0.881 | 0.851 | 0.888 | 0.708 | 0.483 | 0.007 | 7 |
| 8 | 0 | 0 | 0 | 34.0 E | 2.55 | 0.888 | 1.18 | 0.851 | 0.888 | 0.738 | 0.483 | 0.007 | 8 |
| 9 | 0 | 0 | 0 | 31.1 E | 2.75 | 0.888 | 1.23 | 0.880 | 0.888 | 0.708 | 0.483 | 0.007 | 9 |
| 10 | 0 | 0 | 0 | 27.8 E | 3.61 | 0.888 | 1.27 | 0.851 | 0.888 | 0.708 | 0.483 | 0.007 | 10 |
| 11 | 0 | 0 | 0 | 25.8 E | 3.83 | 0.888 | 1.38 | 0.851 | 0.888 | 0.738 | 0.483 | 0.007 | 11 |
| 12 | 0 | 0 | 0 | 23.4 E | 3.72 | 0.888 | 1.38 | 0.851 | 0.851 | 0.783 | 0.453 | 0.007 | 12 |
| 13 | 0 | 0 | 0 | 22.4 E | 1.84 | 0.888 | 1.38 | 0.851 | 0.851 | 0.783 | 0.453 | 0.007 | 13 |
| 14 | 0 | 0 | 0 | 21.8 | 1.58 | 0.888 | 1.33 | 0.851 | 0.851 | 0.783 | 0.388 | 0.007 | 14 |
| 15 | 0 | 0 | 0 | 19.7 | 1.58 | 0.888 | 1.33 | 0.851 | 0.851 | 0.788 | 0.088 | 0.007 | 15 |
| 16 | 0 | 0 | 0 | 14.7 | 1.61 | 0.888 | 1.33 | 0.851 | 0.851 | 0.783 | 0.018 | 0.007 | 16 |
| 17 | 0 | 0 | 0 | 14.3 | 1.61 | 0.888 | 1.42 | 0.823 | 0.823 | 0.783 | 0.008 | 0.007 | 17 |
| 18 | 0 | 0 | 0 | 13.7 | 1.61 | 0.888 | 1.53 | 0.823 | 0.888 | 0.783 | 0.008 | 0.008 | 18 |
| 19 | 0 | 0 | 0 | 13.3 | 1.58 | 0.888 | 1.84 | 0.888 | 0.823 | 0.738 | 0.008 | 0.008 | 19 |
| 20 | 0 | 0 | 0 | 9.88 | 1.47 | 0.704 | 1.81 | 0.888 | 0.823 | 0.880 | 0.008 | 0.008 | 20 |
| 21 | 0 | 0 | 0 | 8.20 | 1.33 | 0.848 | 1.38 | 0.823 | 0.851 | 0.880 | 0.008 | 0.008 | 21 |
| 22 | 0 | 0 | 0 | 6.31 | 1.33 | 0.848 | 0.821 | 0.823 | 0.851 | 0.880 | 0.008 | 0.008 | 22 |
| 23 | 0 | 0 | 0 | 5.83 | 1.38 | 0.848 | 0.788 | 0.823 | 0.851 | 0.738 | 0.008 | 0.008 | 23 |
| 24 | 0 | 0 | 0 | 3.88 | 1.13 | 0.848 | 0.788 | 0.823 | 0.788 | 0.738 | 0.008 | 0.008 | 24 |
| 25 | 0 | 0 | 0 | 1.87 | 0.838 | 0.848 | 0.738 | 0.888 | 0.788 | 0.738 | 0.008 | 0.008 | 25 |
| 26 | 0 | 0 | 0 | 1.73 | 0.481 | 0.848 | 0.738 | 0.888 | 0.788 | 0.788 | 0.004 | 0.007 | 26 |
| 27 | 0 | 0 | 0 | 1.70 | 0.481 | 0.848 | 0.738 | 0.823 | 0.788 | 0.788 | 0.004 | 0.007 | 27 |
| 28 | 0 | 0 | 0.0038 | 1.70 | 0.481 | 0.848 | 0.788 | 0.851 | 0.788 | 0.738 | 0.008 | 0.007 | 28 |
| 29 | 0 | | 0.0118 | 1.70 | 0.481 | 0.848 | 0.788 | 0.851 | 0.788 | 0.738 | 0.008 | 0.007 | 29 |
| 30 | 0 | | 0.0178 | 1.87 | 0.518 | 0.878 | 0.788 | 0.851 | 0.738 | 0.738 | 0.008 | 0.007 | 30 |
| 31 | 0 | | 0.0428 | 1.78 | 0.838 | 0.848 | 0.738 | 0.851 | 0.738 | 0.738 | 0.008 | 0.008 | 31 |
| | | | 0.0718 | | 0.888 | | 0.738 | 0.833 | | 0.738 | | 0.007 | |
| TOTAL | 0 | 0 | 0.144 | 418.434 | 52.374 | 20.127 | 33.187 | 20.048 | 19.810 | 22.712 | 7.188 | 0.210 | TOTAL |
| MEAN | 0 | 0 | 0.005 | 13.9 | 1.88 | 0.871 | 1.07 | 0.847 | 0.880 | 0.733 | 0.239 | 0.007 | MEAN |
| MAX | 0 | 0 | 0.071 | 38.8 | 3.83 | 0.878 | 1.84 | 0.708 | 0.788 | 0.783 | 0.738 | 0.008 | MAX |
| MIN | 0 | 0 | 0 | 0.088 | 0.481 | 0.838 | 0.738 | 0.888 | 0.888 | 0.880 | 0.004 | 0.008 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 1.02
MAXIMUM DAILY, 38.88 ON APR 7
MINIMUM DAILY, 0 ON JAN 1

SUMMARY FOR THE YEAR 1989

INTERNATIONAL GAUGING STATION
TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 39 47 N
LONG 100 57 29 W
DRAINAGE AREA, 43 700 km²

E - ICE CONDITIONS

REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 0 | JUL | 2 870 |
| FEB | 0 | AUG | 1 730 |
| MAR | 13.4 | SEP | 1 660 |
| APR | 36 000 | OCT | 1 960 |
| MAY | 4 530 | NOV | 618 |
| JUN | 1 740 | DEC | 18.1 |

TOTAL DISCHARGE, 81 200 dam³

## SOUTH MOOSE LAKE AT MOOSE LAKE NARROWS CONTROL STRUCTURE - STATION NO. 05KK005

DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 285.618 | 285.608E | 285.606 | 285.609 | --- | 285.504 | 285.467 | 285.322 | --- | 285.194 | 285.366 | 285.402 | 1 |
| 2 | 285.616 | 285.608E | 285.606 | 285.606 | --- | 285.518 | 285.486 | 285.306 | --- | 285.331 | 285.389 | 285.398 | 2 |
| 3 | 285.616 | 285.608E | 285.605 | 285.606 | --- | 285.484 | 285.441 | 285.316 | --- | 285.376 | 285.402 | 285.398A | 3 |
| 4 | 285.617 | 285.610E | 285.605 | 285.605 | --- | 285.504 | 285.436 | 285.288 | --- | 285.383 | 285.388 | 285.398E | 4 |
| 5 | 285.617 | 285.610E | 285.600 | 285.603 | --- | 285.495 | 285.430 | 285.282A | --- | 285.288 | 285.393 | 285.398E | 5 |
| 6 | 285.614 | 285.611A | 285.603 | 285.597 | --- | 285.477 | 285.432 | 285.281E | --- | 285.285 | 285.394 | 285.394E | 6 |
| 7 | 285.609 | 285.605 | 285.606 | 285.594 | --- | 285.484 | 285.434 | 285.280E | --- | 285.349 | 285.388 | 285.392E | 7 |
| 8 | 285.606 | 285.603 | 285.607 | 285.594 | --- | 285.482 | 285.416 | 285.285E | --- | 285.359 | 285.386 | 285.390E | 8 |
| 9 | 285.607 | 285.607 | 285.606 | 285.591 | --- | 285.483 | 285.422 | 285.285A | --- | 285.334 | 285.404 | 285.387E | 9 |
| 10 | 285.606 | 285.610 | 285.610 | 285.591 | --- | 285.492 | 285.408 | 285.289 | --- | 285.386 | 285.408 | 285.385E | 10 |
| 11 | 285.606 | 285.606 | 285.606 | 285.591 | 285.578A | 285.481 | 285.407 | 285.286 | --- | 285.362 | 285.405 | 285.384E | 11 |
| 12 | 285.603 | 285.606 | 285.612 | 285.589 | 285.572 | 285.404 | 285.416 | 285.286 | --- | 285.347 | 285.405 | 285.378E | 12 |
| 13 | 285.604 | 285.608 | 285.614 | 285.584 | 285.568 | 285.480 | 285.411 | 285.232 | --- | 285.389 | 285.411 | 285.376A | 13 |
| 14 | 285.604 | 285.606E | 285.611 | 285.577 | 285.563 | 285.488 | 285.407 | 285.273 | 285.333A | 285.341 | 285.408 | 285.370 | 14 |
| 15 | 285.604 | 285.607E | 285.610 | 285.578 | 285.567 | 285.489 | 285.400 | 285.267 | 285.328 | 285.331 | 285.414 | 285.371 | 15 |
| 16 | 285.605 | 285.607E | 285.608 | 285.575 | 285.562 | 285.480 | 285.386 | 285.285 | 285.348 | 285.348 | 285.418 | 285.388 | 16 |
| 17 | 285.604 | 285.606E | 285.608 | 285.572 | 285.570 | 285.463 | 285.381 | 285.282 | 285.337 | 285.383 | 285.418 | 285.385 | 17 |
| 18 | 285.603 | 285.605E | 285.609 | 285.569 | 285.566 | 285.439 | 285.380 | 285.280 | 285.311 | 285.444 | 285.417 | 285.383 | 18 |
| 19 | 285.607 | 285.604E | 285.606 | 285.564 | 285.556 | 285.443 | 285.367 | --- | 285.358 | 285.400 | 285.424 | 285.384 | 19 |
| 20 | 285.604 | 285.604E | 285.602 | 285.559 | 285.552 | 285.439 | 285.380 | --- | 285.341 | 285.388 | 285.418 | 285.383 | 20 |
| 21 | 285.606 | 285.603E | 285.606 | 285.560 | 285.565 | 285.424 | 285.372 | --- | 285.351 | 285.383 | 285.412 | 285.385 | 21 |
| 22 | 285.606 | 285.602A | 285.606 | 285.561 | 285.565 | 285.412 | 285.372 | --- | 285.288 | 285.361 | 285.414 | 285.386 | 22 |
| 23 | 285.604 | 285.599 | 285.611 | 285.566 | 285.545 | 285.410 | 285.388 | --- | 285.389 | 285.388 | 285.410 | 285.372 | 23 |
| 24 | 285.609 | 285.599 | 285.611 | 285.564 | 285.533 | 285.386 | 285.383 | --- | 285.300 | 285.380 | 285.408 | 285.374 | 24 |
| 25 | 285.610 | 285.605 | 285.601 | 285.561 | 285.497 | 285.413 | 285.383 | --- | 285.300 | 285.380 | 285.412 | 285.378 | 25 |
| 26 | 285.605 | 285.604 | 285.601 | 285.578 | 285.533 | 285.441 | 285.338 | --- | 285.385 | 285.388 | 285.414 | 285.380 | 26 |
| 27 | 285.605 | 285.605 | 285.603 | 285.576 | 285.523 | 285.484 | 285.327 | --- | 285.388 | 285.384 | 285.409 | 285.378 | 27 |
| 28 | 285.606 | 285.606 | 285.602 | 285.572 | 285.523 | 285.467 | 285.343 | --- | 285.312 | 285.382 | 285.409 | 285.376 | 28 |
| 29 | 285.607E | | 285.603 | 285.571 | 285.536 | 285.488 | 285.328 | --- | 285.347 | 285.380 | 285.413 | 285.384 | 29 |
| 30 | 285.607E | | 285.606 | 285.576 | 285.518 | 285.464 | 285.327 | --- | 285.288 | 285.388 | 285.403 | 285.385 | 30 |
| 31 | 285.606E | | 285.611 | | 285.531 | | 285.327 | --- | | 285.344 | | 285.380 | 31 |
| MEAN | 285.606 | 285.606 | 285.607 | 285.584 | --- | 285.466 | 285.382 | --- | --- | 285.383 | 285.406 | 285.380 | MEAN |
| MAX | 285.618 | 285.611 | 285.614 | 285.606 | --- | 285.518 | 285.458 | --- | --- | 285.444 | 285.424 | 285.402 | MAX |
| MIN | 285.603 | 285.599 | 285.600 | 285.559 | --- | 285.398 | 285.327 | --- | --- | 285.194 | 285.366 | 285.363 | MIN |

WATER LEVELS IN METRES

MAXIMUM DAILY, 285.618 ON JAN 1
MINIMUM DAILY, 285.194 ON OCT 1
MAXIMUM INSTANTANEOUS,
285.621 AT 17:01 CST ON JAN 1

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 53 57 00 N
LONG 100 10 00 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED SINCE 1964

DRAINAGE AREA,
9 180 km²

## SOUTH SEAL RIVER ABOVE FOX LAKE - STATION NO. 05GA001

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 20.88 | 20.18 | 18.58 | 18.88 | 18.58 | --- | 218 | 133 | 71.2 | 57.5 | 45.38 | 24.78 | 1 |
| 2 | 20.88 | 20.08 | 18.48 | 18.88 | 18.58 | --- | 214 | 131 | 70.9 | 57.5 | 45.88 | 24.18 | 2 |
| 3 | 20.88 | 20.08 | 18.48 | 18.88 | 18.48 | --- | 209 | 127 | 70.4 | 56.3 | 45.88 | 23.88 | 3 |
| 4 | 20.88 | 19.88 | 18.38 | 18.78 | 18.48 | --- | 208 | 173 | 69.6 | 57.3 | 45.08 | 22.88 | 4 |
| 5 | 20.88 | 19.88 | 18.38 | 18.88 | 18.48 | --- | 204 | 121 | 68.4 | 57.0 | 44.08 | 22.48 | 5 |
| 6 | 20.88 | 19.88 | 18.38 | 18.88 | 18.48 | --- | 204 | 118 | 67.2 | 54.8 | 43.78 | 21.88 | 6 |
| 7 | 20.88 | 19.88 | 18.28 | 18.88 | 18.48 | --- | 200 | 116 | 66.3 | 55.4 | 41.88 | 21.28 | 7 |
| 8 | 20.88 | 19.78 | 18.18 | 18.88 | 18.88 | --- | 198 | 113 | 64.1 | 55.4 | 40.88 | 20.88 | 8 |
| 9 | 20.88 | 19.78 | 18.18 | 18.88 | 18.88 | --- | 188 | 111 | 63.4 | 54.5 | 38.78 | 20.08 | 9 |
| 10 | 20.88 | 19.88 | 18.08 | 18.88 | 18.88 | --- | 188 | 108 | 62.3 | 54.0 | 38.08 | 19.78 | 10 |
| 11 | 20.88 | 19.88 | 18.08 | 18.88 | 17.78 | --- | 181 | 105 | 61.8 | 54.4 | 38.28 | 19.48 | 11 |
| 12 | 20.88 | 19.88 | 17.98 | 18.48 | 23.38 | --- | 178 | 100 | 62.7 | 53.6 | 37.88 | 18.88 | 12 |
| 13 | 20.88 | 19.48 | 17.88 | 18.38 | 26.48 | --- | 172 | 98.8 | 62.3 | 54.0 | 38.88 | 18.88 | 13 |
| 14 | 20.78 | 19.48 | 17.68 | 18.38 | 26.38 | --- | 167 | 97.6 | 61.0 | 54.8 | 38.28 | 18.08 | 14 |
| 15 | 20.78 | 19.38 | 17.78 | 18.28 | 64.58 | --- | 162 | 94.1 | 62.1 | 53.6 | 38.58 | 17.78 | 15 |
| 16 | 20.78 | 19.28 | 17.78 | 18.28 | --- | --- | 158 | 92.4 | 61.1 | 53.6 | 34.88 | 17.48 | 16 |
| 17 | 20.78 | 19.28 | 17.78 | 18.28 | --- | --- | 154 | 88.2 | 61.3 | 53.5 | 34.08 | 17.18 | 17 |
| 18 | 20.68 | 19.18 | 17.68 | 18.18 | --- | --- | 151 | 86.8 | 62.0 | 53.6 | 33.38 | 16.88 | 18 |
| 19 | 20.88 | 19.08 | 17.68 | 18.18 | --- | --- | 148 | 83.2 | 61.2 | 53.5 | 32.88 | 16.88 | 19 |
| 20 | 20.88 | 18.88 | 17.58 | 18.18 | --- | 261A | 143 | 82.4 | 62.4 | 52.0 | 32.08 | 16.58 | 20 |
| 21 | 20.88 | 18.88 | 17.48 | 18.08 | --- | 250 | 138 | 80.8 | 61.6 | 53.0 | 31.38 | 16.58 | 21 |
| 22 | 20.88 | 18.88 | 17.48 | 18.88 | --- | 248 | 136 | 78.7 | 60.6 | 52.3 | 30.88 | 16.38 | 22 |
| 23 | 20.88 | 18.88 | 17.38 | 18.88 | --- | 252 | 132 | 75.2 | 61.4 | 51.3 | 30.08 | 15.28 | 23 |
| 24 | 20.88 | 18.88 | 17.38 | 18.88 | --- | 246 | 128 | 74.0 | 62.2 | 51.6 | 29.38 | 15.18 | 24 |
| 25 | 20.88 | 18.88 | 17.28 | 18.88 | --- | 248 | 121 | 73.5 | 58.6 | 51.4 | 28.78 | 15.08 | 25 |
| 26 | 20.48 | 18.78 | 17.28 | 18.48 | --- | 238 | 124 | 72.5 | 60.4 | 51.4 | 28.18 | 15.08 | 26 |
| 27 | 20.48 | 18.68 | 17.18 | 18.88 | --- | 238 | 127 | 72.6 | 62.1 | 48.8 | 27.38 | 15.88 | 27 |
| 28 | 20.38 | 18.88 | 17.08 | 18.78 | --- | 232 | 126 | 72.8 | 61.0 | 44.58 | 26.88 | 15.88 | 28 |
| 29 | 20.28 | | 17.08 | 18.68 | --- | 228 | 131 | 72.4 | 60.0 | 43.78 | 26.08 | 15.88 | 29 |
| 30 | 20.28 | | 17.08 | 18.88 | --- | 224 | 133 | 71.4 | 58.7 | 44.38 | 26.48 | 15.88 | 30 |
| 31 | 20.18 | | 18.88 | | --- | | 133 | 71.7 | | 44.68 | | 15.88 | 31 |
| TOTAL | 640.4 | 541.2 | 548.8 | 488.8 | --- | --- | 5 088 | 2 842.0 | 1 800.1 | 1 634.0 | 1 084.0 | 574.2 | TOTAL |
| MEAN | 20.7 | 19.3 | 17.7 | 18.2 | --- | --- | 183 | 84.9 | 63.3 | 52.7 | 36.8 | 18.5 | MEAN |
| MAX | 20.9 | 20.1 | 18.5 | 18.8 | --- | --- | 218 | 133 | 71.2 | 58.3 | 45.8 | 24.7 | MAX |
| MIN | 20.1 | 18.8 | 18.8 | 18.8 | --- | --- | 121 | 71.4 | 58.8 | 43.7 | 26.4 | 15.8 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MINIMUM DAILY, 18.48 ON MAY 3

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 58 06 35 N
LONG 98 13 40 W
DRAINAGE AREA, 13 000 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 55 300 | JUL | 438 000 |
| FEB | 48 800 | AUG | 284 000 |
| MAR | 47 400 | SEP | 184 000 |
| APR | 42 100 | OCT | 141 000 |
| MAY | --- | NOV | 91 800 |
| JUN | --- | DEC | 49 600 |

## SOUTH TOBACCO CREEK NEAR MIAMI - STATION NO. 05OF017

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.0 | 0.0 B | 0.072 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0.0 | 0.0 B | 0.091 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0.0 | 0.0588 | 0.087 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0.0 | 0.3808 | 0.084 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0.0 | 1.15 B | 0.044 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0.0 | 0.7928 | 0.034 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0.0 | 0.3248 | 0.030 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0.0 | 0.2678 | 0.032 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0.0 | 0.2238 | 0.030 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0.0 | 0.1968 | 0.024 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0.0 | 0.1678 | 0.022 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0.0 | 0.3678 | 0.018 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0.0 | 0.8868 | 0.015 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0.0 | 1.44 | 0.007 | 0.331 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0.0 | 1.36 | 0 | 0.268 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0.0 | 1.31 | 0 | 0.158 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0.0 | 0.321 | 0 | 0.148 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0.0 | 0.254 | 0 | 0.107 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0.0 | 0.301 | 0.001 | 0.042 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0.0 | 0.353 | 0.006 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0.0 | 0.367 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0.0 | 0.508 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0.0 | 0.826 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0.0 | 0.426 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0.0 | 0.278 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0.0 | 0.193 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0.0 | 0.140 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0.0 | 0.115 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0.0 | 0.102 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0.0 | 0.088 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0.0 | | 0 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 13.091 | 0.811 | 1.101 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.436 | 0.018 | 0.037 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 1.44 | 0.072 | 0.331 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

SUMMARY FOR THE MONTHS MAR TO OCT

MEAN, 0.080
MAXIMUM DAILY, 1.44 ON APR 14
MINIMUM DAILY, 0.0 ON MAR 1
MAXIMUM INSTANTANEOUS,
2.54 AT 23:52 CST ON APR 15

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 22 50 N
LONG 96 14 55 W
DRAINAGE AREA, 98.9 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 1 130 | OCT | 0 |
| MAY | 44.2 | NOV | --- |
| JUN | 98.1 | DEC | --- |

TOTAL DISCHARGE, 1 270 dam³

## SOUTHERN INDIAN LAKE AT MISSI FALLS - STATION NO. 05EC005

DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | 257.402 | 257.268 | 257.125 | 257.084 | 257.884 | 258.074 | --- | --- | --- | 257.820A | 257.677 | 1 |
| 2 | --- | 257.403 | 257.268 | 257.126 | 257.080 | 257.701 | 258.088 | --- | --- | --- | 257.811 | 257.676 | 2 |
| 3 | --- | 257.404 | 257.248 | 257.122 | 257.081 | 257.743 | 258.084 | --- | --- | --- | 257.777 | 257.668 | 3 |
| 4 | --- | 257.404 | 257.240 | 257.115 | 257.082 | 257.784 | 258.112 | --- | --- | --- | 257.778 | 257.672 | 4 |
| 5 | --- | 257.400 | 257.238 | 257.113 | 257.081 | 257.768 | 258.111 | --- | --- | --- | 257.782 | 257.669 | 5 |
| 6 | --- | 257.390 | 257.227 | 257.106 | 257.092 | 257.756 | 258.138 | --- | --- | 257.893A | 257.785 | 257.690 | 6 |
| 7 | --- | 257.376 | 257.221 | 257.101 | 257.055 | 257.786 | 258.147 | --- | --- | --- | 257.783 | 257.648 | 7 |
| 8 | --- | 257.373 | 257.220 | 257.098 | 257.086 | 257.786 | 258.160 | --- | --- | --- | 257.761 | 257.637 | 8 |
| 9 | --- | 257.368 | 257.218 | 257.098 | 257.088 | 257.783 | 258.141 | --- | --- | --- | 257.775 | 257.630 | 9 |
| 10 | --- | 257.366 | 257.208 | 257.098 | 257.090 | 257.780 | 258.124 | --- | --- | --- | 257.788 | 257.628 | 10 |
| 11 | --- | 257.367 | 257.207 | 257.090 | 257.121 | 257.787 | 258.122 | --- | --- | --- | 257.778 | 257.620 | 11 |
| 12 | --- | 257.357 | 257.207 | 257.088 | 257.188 | 257.818 | 258.183 | --- | --- | --- | 257.775 | 257.609 | 12 |
| 13 | 257.477A | 257.350 | 257.208 | 257.084 | 257.208 | 257.838 | 258.188 | --- | --- | --- | 257.787 | 257.602 | 13 |
| 14 | --- | 257.338 | 257.205 | 257.084 | 257.228 | 257.858 | 258.188 | --- | --- | --- | 257.788 | 257.598 | 14 |
| 15 | --- | 257.332 | 257.204 | 257.085 | 257.268 | 257.871 | 258.188 | --- | --- | --- | 257.784 | 257.580 | 15 |
| 16 | --- | 257.330 | 257.205 | 257.084 | 257.288 | 257.883 | 258.184 | --- | --- | --- | 257.765 | 257.584 | 16 |
| 17 | --- | 257.323 | 257.204 | 257.074 | 257.318 | 257.882 | 258.182 | --- | --- | --- | 257.764 | 257.578 | 17 |
| 18 | --- | 257.321 | 257.204 | 257.068 | 257.340 | 257.926 | 258.178 | --- | --- | --- | 257.744 | 257.568 | 18 |
| 19 | --- | 257.318 | 257.203 | 257.058 | 257.367 | 257.887 | 258.187 | --- | --- | --- | 257.738 | 257.562 | 19 |
| 20 | --- | 257.315 | 257.204 | 257.051 | 257.387 | 257.888 | 258.185 | --- | --- | --- | 257.744 | 257.561 | 20 |
| 21 | --- | 257.308 | 257.187 | 257.040 | 257.388 | 258.017 | 258.175 | --- | --- | --- | 257.738 | 257.558 | 21 |
| 22 | --- | 257.288 | 257.168 | 257.035 | 257.448 | 258.012 | 258.187 | --- | --- | --- | 257.731 | 257.542 | 22 |
| 23 | --- | 257.281 | 257.174 | 257.037 | 257.476 | 258.011 | 258.230 | --- | --- | --- | 257.728 | 257.542 | 23 |
| 24 | --- | 257.269 | 257.167 | 257.052 | 257.488 | 258.010 | 258.193 | --- | --- | --- | 257.711 | 257.527 | 24 |
| 25 | --- | 257.268 | 257.162 | 257.057 | 257.523 | 258.011 | 258.158A | --- | --- | --- | 257.710 | 257.528 | 25 |
| 26 | 257.404A | 257.262 | 257.142 | 257.058 | 257.540 | 258.003 | --- | --- | --- | --- | 257.707 | 257.513 | 26 |
| 27 | 257.402 | 257.277 | 257.138 | 257.058 | 257.561 | 258.008 | --- | --- | --- | --- | 257.707 | 257.508 | 27 |
| 28 | 257.424 | 257.276 | 257.138 | 257.061 | 257.601 | 258.028 | --- | --- | --- | --- | 257.691 | 257.505 | 28 |
| 29 | 257.404 | | 257.137 | 257.064 | 257.638 | 258.045 | --- | --- | --- | --- | 257.688 | 257.503 | 29 |
| 30 | 257.403 | | 257.137 | 257.063 | 257.664 | 258.072 | --- | --- | --- | --- | 257.687 | 257.488 | 30 |
| 31 | 257.403 | | 257.134 | | 257.677 | | --- | --- | | --- | | 257.488 | 31 |
| MEAN | --- | 257.341 | 257.187 | 257.080 | 257.388 | 257.888 | --- | --- | --- | --- | 257.762 | 257.584 | MEAN |
| MAX | --- | 257.404 | 257.268 | 257.126 | 257.677 | 258.072 | --- | --- | --- | --- | 257.820 | 257.677 | MAX |
| MIN | --- | 257.276 | 257.134 | 257.035 | 257.080 | 257.884 | --- | --- | --- | --- | 257.687 | 257.488 | MIN |

WATER LEVELS IN METRES

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 57 15 47 N
LONG 98 08 40 W

A - MANUAL GAUGE

MINIMUM DAILY, 257.035 ON APR 22

REGULATED

DRAINAGE AREA,
261 000 km²

WATER LEVELS ARE REFERRED TO CHURCHILL RIVER DATUM (MANITOBA HYDRO)

## SOUTHERN INDIAN LAKE AT SOUTH BAY - STATION NO. 05EC003

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 257.440E | 257.301 | 257.178E | 257.058 | 256.984 | 257.812 | 257.997 | 258.038 | 257.875 | 257.870 | 257.788 | --- | 1 |
| 2 | 257.432E | 257.300 | 257.170E | 257.052 | 256.981 | 257.827 | 258.011 | 258.038 | 257.865 | 257.860 | 257.767 | --- | 2 |
| 3 | 257.428E | 257.291 | 257.167E | 257.045 | 256.988 | 257.842 | 258.026 | 258.038 | 257.859 | 257.834 | 257.758 | --- | 3 |
| 4 | 257.423A | 257.291 | 257.167 | 257.040 | 256.990 | 257.846 | 258.022 | 258.041 | 257.867 | 257.824 | 257.752 | --- | 4 |
| 5 | 257.412 | 257.292 | 257.158 | 257.036 | 256.981 | 257.894 | 258.047 | 258.017 | 257.867 | 257.847 | 257.785 | --- | 5 |
| 6 | 257.403 | 257.291 | 257.156 | 257.030 | 256.983 | 257.878 | 258.038 | 258.002 | 257.867 | 257.875 | 257.748 | --- | 6 |
| 7 | 257.397 | 257.283 | 257.152 | 257.030 | 256.987 | 257.881 | 258.080 | 258.001 | 257.873 | 257.830 | 257.751 | --- | 7 |
| 8 | 257.391 | 257.273 | 257.150 | 257.028 | 257.002 | 257.887 | 258.062 | 257.997 | 257.871 | 257.838 | 257.748 | --- | 8 |
| 9 | 257.386 | 257.272 | 257.157 | 257.016 | 257.023 | 257.710 | 258.075 | 257.992 | 257.862 | 257.850 | 257.741 | --- | 9 |
| 10 | 257.387 | 257.269 | 257.154 | 257.018 | 257.036 | 257.724 | 258.074 | 257.992 | 257.861 | 257.842 | 257.738 | --- | 10 |
| 11 | 257.381 | 257.264 | 257.140 | 257.013 | 257.066 | 257.740 | 258.088 | 257.990 | 257.858 | 257.846 | 257.728 | --- | 11 |
| 12 | 257.368 | 257.272 | 257.134 | 257.009 | 257.100 | 257.763 | 258.074 | 257.984 | 257.831 | 257.878 | 257.719 | --- | 12 |
| 13 | 257.365 | 257.264 | 257.128A | 257.007 | 257.138 | 257.784 | 258.073 | 257.967 | 257.862 | 257.848 | 257.711 | --- | 13 |
| 14 | 257.378 | 257.242 | 257.123E | 257.000 | 257.188 | 257.798 | 258.078 | 257.952 | 257.858 | 257.848 | 257.704 | --- | 14 |
| 15 | 257.370 | 257.238 | 257.116E | 257.018 | 257.188 | 257.777 | 258.078 | 257.958 | 257.888 | 257.848 | 257.704 | --- | 15 |
| 16 | 257.368 | 257.230 | 257.111E | 257.002 | 257.230 | 257.767 | 258.082 | 257.943 | 257.858 | 257.835 | 257.688 | --- | 16 |
| 17 | 257.359 | 257.225 | 257.108E | 256.982 | 257.260 | 257.848 | 258.088 | 257.948 | 257.885 | 257.832 | 257.688 | --- | 17 |
| 18 | 257.362 | 257.230 | 257.110E | 256.988 | 257.291 | 257.858 | 258.078 | 257.960 | 257.888 | 257.798 | 257.681 | --- | 18 |
| 19 | 257.368 | 257.224 | 257.107E | 256.986 | 257.323 | 257.873 | 258.077 | 257.948 | 257.880 | 257.823 | 257.683A | --- | 19 |
| 20 | 257.357 | 257.223 | 257.100E | 256.987 | 257.348 | 257.888 | 258.078 | 257.900 | 257.852 | 257.837 | 257.678E | --- | 20 |
| 21 | 257.368 | 257.218E | 257.098E | 256.993 | 257.380 | 257.888 | 258.088 | 257.931 | 257.885 | 257.828 | 257.670E | --- | 21 |
| 22 | 257.361 | 257.214E | 257.092E | 256.994 | 257.410 | 257.935 | 258.082 | 257.918 | 257.884 | 257.832 | 257.658E | --- | 22 |
| 23 | 257.350 | 257.214 | 257.081E | 257.014 | 257.438 | 257.928 | 258.084 | 257.892 | 257.907 | 257.834 | 257.664E | --- | 23 |
| 24 | 257.345 | 257.212 | 257.080E | 257.008 | 257.457 | 257.943 | 258.081 | 257.892 | 257.851 | 257.837 | 257.660E | --- | 24 |
| 25 | 257.344 | 257.207 | 257.078E | 257.003 | 257.491 | 257.944 | 258.077 | 257.913 | 257.873 | 257.807 | 257.648E | --- | 25 |
| 26 | 257.348 | 257.182 | 257.070E | 257.007 | 257.500 | 257.972 | 258.088 | 257.915 | 257.828 | 257.812 | 257.642E | --- | 26 |
| 27 | 257.340 | 257.188 | 257.081E | 256.995 | 257.525 | 257.983 | 258.088 | 257.896 | 257.838 | 257.863 | 257.638E | --- | 27 |
| 28 | 257.338 | 257.182E | 257.087E | 257.000 | 257.535 | 257.958 | 258.048 | 257.892 | 257.873 | 257.885 | 257.632E | --- | 28 |
| 29 | 257.334 | | 257.058E | 256.990 | 257.583 | 257.970 | 258.043 | 257.902 | 257.885 | 257.888 | 257.632E | --- | 29 |
| 30 | 257.319 | | 257.054A | 256.985 | 257.578 | 257.981 | 258.043 | 257.864 | 257.866 | 257.786 | 257.632E | --- | 30 |
| 31 | 257.308 | | 257.067 | | 257.588 | | 258.043 | 257.877 | | 257.807 | | --- | 31 |
| MEAN | 257.372 | 257.248 | 257.115 | 257.011 | 257.243 | 257.806 | 258.059 | 257.958 | 257.858 | 257.834 | 257.701 | --- | MEAN |
| MAX | 257.440 | 257.301 | 257.178 | 257.058 | 257.588 | 257.981 | 258.088 | 258.041 | 257.884 | 257.878 | 257.788 | --- | MAX |
| MIN | 257.308 | 257.182 | 257.050 | 256.985 | 256.969 | 257.812 | 257.997 | 257.877 | 257.807 | 257.786 | 257.632 | --- | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MAXIMUM DAILY, 258.088 ON JUL 17
MINIMUM DAILY, 256.969 ON MAY 3
MAXIMUM INSTANTANEOUS,
258.102 AT 04:45 CST ON JUL 26

WATER LEVELS ARE REFERRED TO CHURCHILL RIVER DATUM (MANITOBA HYDRO)

TYPE OF GAUGE - RECORDING
LOCATION - LAT 56 40 51 N
LONG 99 01 11 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED

DRAINAGE AREA,
281 000 km²

## SOUTHERN INDIAN LAKE NEAR OPACHUANAU LAKE - STATION NO. 05EC007

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | 97.072 | 96.982 | 97.804 | 97.987 | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | --- | 97.081 | 96.982 | 97.818 | 98.004 | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | --- | 97.086 | 96.973 | 97.838A | 98.024 | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | --- | 97.081 | 96.985 | --- | 98.003A | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | --- | 97.048 | 96.981 | --- | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | --- | 97.038 | 96.987 | --- | --- | --- | --- | 97.858A | --- | --- | 6 |
| 7 | --- | --- | --- | 97.037 | 96.982 | --- | --- | --- | --- | 97.841 | --- | --- | 7 |
| 8 | --- | --- | --- | 97.034 | 97.001 | --- | --- | --- | --- | 97.833 | --- | --- | 8 |
| 9 | --- | --- | --- | 97.024 | 97.018 | --- | --- | --- | --- | 97.850 | --- | --- | 9 |
| 10 | --- | --- | --- | 97.028 | 97.032 | --- | --- | --- | --- | 97.852 | --- | --- | 10 |
| 11 | --- | --- | --- | 97.024 | 97.066 | --- | --- | --- | --- | 97.841 | --- | --- | 11 |
| 12 | --- | --- | --- | 97.021 | 97.093 | --- | --- | --- | --- | 97.883 | --- | --- | 12 |
| 13 | --- | --- | --- | 97.013 | 97.138 | --- | --- | --- | --- | 97.853 | --- | --- | 13 |
| 14 | --- | --- | --- | 97.008 | 97.188 | 97.773A | --- | --- | --- | 97.858 | --- | --- | 14 |
| 15 | --- | --- | --- | 97.028 | 97.193 | 97.778 | --- | --- | --- | 97.858 | --- | --- | 15 |
| 16 | --- | --- | --- | 96.989 | 97.235 | 97.780 | --- | --- | --- | 97.843 | --- | --- | 16 |
| 17 | --- | --- | --- | 97.000 | 97.261 | 97.888 | --- | --- | --- | 97.827 | --- | --- | 17 |
| 18 | --- | --- | --- | 96.993 | 97.262 | 97.885 | --- | --- | --- | 97.770 | --- | --- | 18 |
| 19 | --- | --- | --- | 96.993 | 97.326 | 97.877 | --- | --- | --- | 97.834 | --- | --- | 19 |
| 20 | --- | --- | --- | 96.997 | 97.366 | 97.883 | --- | --- | --- | 97.850 | --- | --- | 20 |
| 21 | --- | --- | --- | 97.005 | 97.376 | 97.881 | --- | --- | --- | 97.848 | --- | --- | 21 |
| 22 | --- | --- | --- | 97.003 | 97.403 | 97.936 | --- | --- | --- | 97.844 | --- | --- | 22 |
| 23 | --- | --- | --- | 97.013 | 97.423 | 97.948 | --- | --- | --- | 97.824 | --- | --- | 23 |
| 24 | --- | --- | --- | 97.003 | 97.447 | 97.986 | --- | --- | --- | 97.850 | --- | --- | 24 |
| 25 | --- | --- | --- | 97.003 | 97.483 | 97.988 | --- | --- | --- | 97.814 | --- | --- | 25 |
| 26 | 97.351A | --- | --- | 97.005 | 97.493 | 98.008 | --- | --- | --- | 97.838 | --- | --- | 26 |
| 27 | --- | --- | --- | 96.984 | 97.533 | 97.978 | --- | --- | --- | 97.888 | --- | --- | 27 |
| 28 | --- | --- | 97.083A | 96.988 | 97.530 | 97.974 | --- | --- | --- | 97.888 | --- | --- | 28 |
| 29 | --- | --- | 97.078 | 96.983 | 97.537 | 97.973 | --- | --- | --- | 97.900 | --- | --- | 29 |
| 30 | --- | --- | 97.087 | 96.983 | 97.587 | 97.988 | --- | --- | --- | 97.903 | --- | --- | 30 |
| 31 | --- | --- | 97.071 | | 97.577 | | --- | --- | --- | 97.838 | | --- | 31 |
| MEAN | --- | --- | --- | 97.017 | 97.238 | --- | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | 97.073 | 97.577 | --- | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | 96.983 | 96.973 | --- | --- | --- | --- | --- | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 56 47 00 N
LONG 99 31 00 W

A - MANUAL GAUGE

REGULATED

DRAINAGE AREA,
281 000 km²

WATER LEVELS ARE REFERRED TO ASSUMED DATUM

## SOUTHERN INDIAN LAKE NEAR SOUTH INDIAN LAKE - STATION NO. 05EC001

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | 257.278 | 257.147 | 257.024 | 256.948 | 257.863 | 257.860E | 258.018 | 257.875 | 257.845 | 257.784 | 257.585 | 1 |
| 2 | --- | 257.288 | 257.142 | 257.018 | 256.948 | 257.877 | 258.002E | 258.018 | 257.864 | 257.828 | 257.747 | 257.567 | 2 |
| 3 | --- | 257.282 | 257.140 | 257.013 | 256.934 | 257.866 | 258.013 | 258.013 | 257.857 | 257.812 | 257.724 | 257.571 | 3 |
| 4 | --- | 257.267 | 257.138 | 257.005 | 256.945 | 257.898 | 258.012 | 258.015 | 257.860 | 257.818 | 257.727 | 257.574 | 4 |
| 5 | --- | 257.268 | 257.130 | 256.998 | 256.941 | 257.814 | 258.030 | 257.987 | 257.857 | 257.827 | 257.731 | 257.578 | 5 |
| 6 | --- | 257.268 | 257.128 | 256.993 | 256.940 | 257.823 | 258.028 | 257.982 | 257.852 | 257.835 | 257.730 | 257.571 | 6 |
| 7 | --- | 257.257 | 257.127 | 256.991 | 256.957 | 257.836 | 258.038 | 257.980 | 257.860 | 257.821 | 257.715 | 257.564 | 7 |
| 8 | --- | 257.238 | 257.121 | 256.980 | 256.958 | 257.847 | 258.050 | 257.978 | 257.856 | 257.814 | 257.716 | 257.562 | 8 |
| 9 | --- | 257.247 | 257.127 | 256.976 | 256.977 | 257.862 | 258.061 | 257.973 | 257.844 | 257.828 | 257.718 | 257.534 | 9 |
| 10 | --- | 257.244 | 257.127 | 256.978 | 256.988 | 257.877A | 258.054 | 257.972 | 257.886 | 257.830 | 257.708 | 257.526 | 10 |
| 11 | --- | 257.238 | 257.113 | 256.973 | 257.026 | 257.885E | 258.053 | 257.972 | 257.844 | 257.833 | 257.708 | 257.520 | 11 |
| 12 | --- | 257.240 | 257.088 | 256.972 | 257.058 | 257.710E | 258.055 | 257.972 | 257.833 | 257.855 | 257.698 | 257.515 | 12 |
| 13 | --- | 257.223 | 257.088 | 256.978 | 257.093 | 257.730E | 258.050 | 257.982 | 257.848 | 257.838 | 257.693 | 257.508 | 13 |
| 14 | --- | 257.209 | 257.087 | 256.966 | 257.127 | 257.748E | 258.048 | 257.963 | 257.840 | 257.831 | 257.682 | 257.500 | 14 |
| 15 | --- | 257.204 | 257.080 | 256.978 | 257.158 | 257.768A | 258.054 | 257.948 | 257.844 | 257.838 | 257.681 | 257.490 | 15 |
| 16 | --- | 257.198 | 257.071 | 256.986 | 257.182 | 257.770 | 258.056 | 257.931 | 257.844 | 257.834 | 257.678 | 257.482 | 16 |
| 17 | --- | 257.183 | 257.070 | 256.980 | 257.208 | 257.817 | 258.057 | 257.938 | 257.837 | 257.827 | 257.674 | 257.477 | 17 |
| 18 | --- | 257.184 | 257.078 | 256.966 | 257.238 | 257.836 | 258.057 | 257.937 | 257.842 | 257.788 | 257.684 | 257.488 | 18 |
| 19 | --- | 257.201 | 257.073 | 256.981 | 257.268 | 257.867 | 258.058 | 257.928 | 257.834 | 257.813 | 257.687 | 257.492 | 19 |
| 20 | --- | 257.197 | 257.068 | 256.968 | 257.288 | 257.888 | 258.061 | 257.896 | 257.838 | 257.821 | 257.686 | 257.486 | 20 |
| 21 | --- | 257.181 | 257.068 | 256.986 | 257.323 | 257.874 | 258.049 | 257.906 | 257.841 | 257.809 | 257.647 | 257.449 | 21 |
| 22 | --- | 257.174 | 257.068 | 256.960 | 257.386 | 257.858E | 258.046 | 257.898 | 257.856 | 257.818 | 257.642 | 257.437 | 22 |
| 23 | --- | 257.178 | 257.063 | 256.978 | 257.388 | 257.805E | 258.037 | 257.878 | 257.814 | 257.806 | 257.638 | 257.438 | 23 |
| 24 | --- | 257.176 | 257.063 | 256.970 | 257.411 | 257.820E | 258.044 | 257.874 | 257.836 | 257.798 | 257.626 | 257.440 | 24 |
| 25 | --- | 257.170 | 257.068 | 256.971 | 257.432 | 257.818E | 258.057 | 257.886 | 257.886 | 257.781 | 257.626 | 257.422 | 25 |
| 26 | 257.308A | 257.163 | 257.046 | 256.974 | 257.450 | 257.845E | 258.064 | 257.903 | 257.827 | 257.788 | 257.618 | 257.427 | 26 |
| 27 | 257.308 | 257.157 | 257.036 | 256.987 | 257.471 | 257.850E | 258.044 | 257.887 | 257.830 | 257.808 | 257.612 | 257.418 | 27 |
| 28 | 257.301 | 257.158 | 257.031 | 256.982 | 257.488 | 257.847E | 258.035 | 257.862 | 257.888 | 257.844 | 257.598 | 257.402 | 28 |
| 29 | 257.308 | | 257.032 | 256.987 | 257.507 | 257.860E | 258.030 | 257.867 | 257.837 | 257.793 | 257.588 | 257.393 | 29 |
| 30 | 257.291 | | 257.021 | 256.982 | 257.530 | 257.868E | 258.023 | 257.878 | 257.828 | 257.780 | 257.600 | 257.402 | 30 |
| 31 | 257.282 | | 257.023 | | 257.540 | | 258.026 | 257.873 | | 257.775 | | 257.381 | 31 |
| MEAN | --- | 257.216 | 257.088 | 256.977 | 257.198 | 257.776 | 258.042 | 257.940 | 257.845 | 257.818 | 257.676 | 257.484 | MEAN |
| MAX | --- | 257.278 | 257.147 | 257.024 | 257.540 | 257.885 | 258.057 | 258.018 | 257.875 | 257.855 | 257.784 | 257.585 | MAX |
| MIN | --- | 257.163 | 257.021 | 256.962 | 256.934 | 257.583 | 257.860 | 257.873 | 257.814 | 257.775 | 257.588 | 257.381 | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MAXIMUM DAILY, 258.057 ON JUL 17
MINIMUM DAILY, 256.934 ON MAY 3
MAXIMUM INSTANTANEOUS,
258.083 AT 17:30 CST ON JUL 17

TYPE OF GAUGE - RECORDING
LOCATION - LAT 56 46 44 N
LONG 98 56 20 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED SINCE 1976

DRAINAGE AREA,
261 000 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (MAN. GOVT. EXT.)

## SPLIT LAKE AT SPLIT LAKE - STATION NO. 05UF003

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 188.788 | 188.648 | 188.288 | 188.253 | 188.071 | 188.341 | 188.548 | 188.388 | 188.876 | 188.855 | 1 |
| 2 | --- | --- | 188.801 | 188.633 | 188.288 | 188.203 | 188.108 | 188.335 | 188.557 | 188.448 | 188.873 | 187.814 | 2 |
| 3 | --- | --- | 188.826 | 188.622 | 188.310 | 188.142 | 188.108 | 188.288 | 188.564 | 188.476 | 188.881 | 187.867 | 3 |
| 4 | --- | --- | 188.844 | 188.488 | 188.348 | 188.133 | 188.088 | 188.343 | 188.595 | 188.508 | 188.864 | 187.100 | 4 |
| 5 | --- | --- | 188.883 | 188.480 | 188.372 | 188.123 | 188.083 | 188.417 | 188.578 | 188.648 | 188.882 | 187.127 | 5 |
| 6 | --- | --- | 188.858 | 188.488 | 188.367 | 188.088 | 188.081 | 188.437 | 188.584 | 188.588 | 188.852 | 187.188 | 6 |
| 7 | --- | --- | 188.878 | 188.480 | 188.407 | 188.044 | 188.081 | 188.430 | 188.591 | 188.614 | 188.853 | 187.207 | 7 |
| 8 | --- | --- | 188.881 | 188.442 | 188.435 | 188.042 | 188.058 | 188.424 | 188.628 | 188.641 | 188.858 | 187.234 | 8 |
| 9 | --- | --- | 188.822 | 188.438 | 188.488 | 188.027 | 188.046 | 188.401 | 188.626 | 188.673 | 188.881 | 187.230 | 9 |
| 10 | --- | --- | 188.778 | 188.433 | 188.518 | 188.083 | 188.078 | 188.388 | 188.614 | 188.700 | 188.882 | 187.188 | 10 |
| 11 | --- | --- | 188.727 | 188.411 | 188.583 | 188.881 | 188.058 | 188.422 | 188.883 | 188.723 | 188.888 | 187.187 | 11 |
| 12 | --- | --- | 188.682 | 188.384 | 188.602 | 188.888 | 188.048 | 188.388 | 188.638 | 188.727 | 188.878 | 187.144 | 12 |
| 13 | --- | 188.812A | 188.687 | 188.377 | 188.651 | 188.832 | 188.063 | 188.418 | 188.638 | 188.748 | 187.070 | 187.122 | 13 |
| 14 | --- | 188.808 | 188.678 | 188.368 | 188.641 | 188.888 | 188.087 | 188.488 | 188.642 | 188.781 | 187.118 | 187.088 | 14 |
| 15 | --- | 188.873 | 188.884 | 188.343 | 188.632 | 188.883 | 188.128 | 188.448 | 188.648 | 188.747 | 187.148 | 187.102 | 15 |
| 16 | --- | 188.873 | 188.781 | 188.328 | 188.821 | 188.887 | 188.178 | 188.488 | 188.648 | 188.738 | 187.138 | 187.142 | 16 |
| 17 | --- | 188.881 | 188.732 | 188.323 | 188.888 | 188.853 | 188.183 | 188.481 | 188.628 | 188.744 | 187.028 | 187.148 | 17 |
| 18 | --- | 188.817 | 188.788 | 188.328 | 188.884 | 188.888 | 188.208 | 188.431 | 188.648 | 188.733 | 188.870 | 187.128 | 18 |
| 19 | --- | 188.818 | 188.782 | 188.308 | 188.630 | 188.882 | 188.188 | 188.424 | 188.644 | 188.744 | 187.028 | 187.104 | 19 |
| 20 | --- | 188.801 | 188.787 | 188.284 | 188.488 | 188.888 | 188.227 | 188.488 | 188.827 | 188.788 | 188.812 | 187.082 | 20 |
| 21 | --- | 188.888 | 188.748 | 188.271 | 188.478 | 188.888 | 188.217 | 188.448 | 188.822 | 188.784 | 188.827 | 187.084 | 21 |
| 22 | --- | 188.841 | 188.708 | 188.288 | 188.478 | 188.884 | 188.224 | 188.438 | 188.823 | 188.774 | 188.832 | 187.108 | 22 |
| 23 | --- | 188.801 | 188.884 | 188.248 | 188.488 | 188.841 | 188.178 | 188.434 | 188.811 | 188.778 | 188.841 | 187.188 | 23 |
| 24 | --- | 188.788 | 188.828 | 188.263 | 188.482 | 188.880 | 188.178 | 188.477 | 188.583 | 188.773 | 188.838 | 187.218 | 24 |
| 25 | 188.848A | 188.781 | 188.802 | 188.287 | 188.488 | 188.828 | 188.181 | 188.808 | 188.808 | 188.777 | 188.838 | 187.247 | 25 |
| 26 | --- | 188.783 | 188.888 | 188.288 | 188.481 | 188.887 | 188.288 | 188.828 | 188.483 | 188.784 | 188.824 | 187.278 | 26 |
| 27 | --- | 188.781 | 188.888 | 188.272 | 188.382 | 188.887 | 188.242 | 188.482 | 188.488 | 188.887 | 188.818 | 187.288 | 27 |
| 28 | --- | 188.773 | 188.883 | 188.277 | 188.382 | 188.838 | 188.248 | 188.488 | 188.428 | 188.748 | 188.817 | 187.287 | 28 |
| 29 | --- | | 188.882 | 188.278 | 188.387 | 188.884 | 188.281 | 188.818 | 188.421 | 188.842 | 188.838 | 187.285 | 29 |
| 30 | --- | | 188.888 | 188.278 | 188.327 | 188.838 | 188.283 | 188.834 | 188.388 | 188.885 | 188.848 | 187.242 | 30 |
| 31 | --- | | 188.881 | | 188.288 | | 188.314 | 188.843 | | 188.888 | | 187.384 | 31 |
| MEAN | --- | --- | 188.718 | 188.384 | 188.487 | 188.812 | 188.180 | 188.438 | 188.880 | 188.887 | 188.837 | 187.188 | MEAN |
| MAX | --- | --- | 188.878 | 188.888 | 188.881 | 188.283 | 188.314 | 188.843 | 188.883 | 188.888 | 187.148 | 187.384 | MAX |
| MIN | --- | --- | 188.881 | 188.248 | 188.288 | 188.887 | 188.048 | 188.288 | 188.388 | 188.388 | 188.882 | 188.888 | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MAXIMUM DAILY, 187.384 ON DEC 31
MINIMUM DAILY, 188.887 ON JUN 24
MAXIMUM INSTANTANEOUS,
187.374 AT 23:15 CST ON DEC 31

TYPE OF GAUGE - RECORDING
LOCATION - LAT 56 14 43 N
LONG 98 05 40 W

A - MANUAL GAUGE

REGULATED SINCE 1960

DRAINAGE AREA,
1 050 000 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (MAN. GOVT. EXT.)

## ST. MALO LAKE NEAR ST. MALO - STATION NO. 05OE003

DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 285.801 | 285.828 | 285.828 | 285.845 | 286.144 | 286.118 | 286.128 | 286.038 | 286.088 | 286.001 | 285.852 | 285.888 | 1 |
| 2 | 285.802 | 285.828 | 285.828 | 285.847 | 286.146 | 286.118 | 286.118 | 286.035 | 286.086 | 285.998 | 285.852 | 285.888 | 2 |
| 3 | 285.808 | 285.827 | 285.828 | 285.848 | 286.148 | 286.117 | 286.116 | 286.080 | 286.087 | 285.998 | 285.852 | 285.885 | 3 |
| 4 | 285.807 | 285.827 | 285.828 | 285.848 | 286.145 | 286.116 | 286.116 | 286.086 | 286.087 | 285.994 | 285.852 | 285.870 | 4 |
| 5 | 285.806 | 285.827 | 285.830 | 285.864 | 286.143 | 286.116 | 286.107 | 286.048 | 286.088 | 285.994 | 285.853 | 285.871 | 5 |
| 6 | 285.807 | 285.828 | 285.828 | 285.8578 | 286.143 | 286.118 | 286.108 | 286.047 | 286.088 | 285.991 | 285.853 | 285.871 | 6 |
| 7 | 285.812 | 285.828 | 285.828 | 285.861E | 286.142 | 286.119 | 286.109 | 286.048 | 286.086 | 285.988 | 285.864 | 285.872 | 7 |
| 8 | 285.814 | 285.826 | 285.828 | 285.868E | 286.141 | 286.118 | 286.110 | 286.048 | 286.088 | 285.990 | 285.864 | 285.873 | 8 |
| 9 | 285.815 | 285.824 | 285.828 | 285.869E | 286.137 | 286.118 | 286.117 | 286.045 | 286.084 | 285.988 | 285.885 | 285.874 | 9 |
| 10 | 285.817 | 285.821 | 285.830 | 285.872E | 286.128 | 286.103 | 286.117 | 286.048 | 286.082 | 285.988 | 285.869 | 285.876 | 10 |
| 11 | 285.820 | 285.822 | 285.830 | 285.876E | 286.121 | 286.084 | 286.116 | 286.044 | 286.081 | 285.985 | 285.887 | 285.878 | 11 |
| 12 | 285.823 | 285.822 | 285.831 | 285.881A | 286.118 | 286.083 | 286.122 | 286.034 | 286.081 | 285.983 | 285.886 | 285.878 | 12 |
| 13 | 285.824 | 285.822 | 285.831 | 285.881 | 286.111 | 286.108 | 286.123 | 286.032 | 286.081 | 285.982 | 285.887 | 285.878 | 13 |
| 14 | 285.823 | 285.822 | 285.832 | 285.868 | 286.107 | 286.118 | 286.118 | 286.031 | 286.081 | 285.981 | 285.857 | 285.878 | 14 |
| 15 | 285.823 | 285.823 | 285.832 | 285.763 | 286.104 | 286.121 | 286.111 | 286.031 | 286.080 | 285.980 | 285.888 | 285.878 | 15 |
| 16 | 285.823 | 285.824 | 285.834 | 285.770A | 286.101 | 286.117 | 286.102 | 286.031 | 286.088 | 285.980 | 285.868 | 285.878 | 16 |
| 17 | 285.822 | 285.826 | 285.834 | 285.813A | 286.097 | 286.111 | 286.087 | 286.027 | 286.084 | 285.978 | 285.888 | 285.878 | 17 |
| 18 | 285.822 | 285.826 | 285.833 | 285.858A | 286.096 | 286.112 | 286.088 | 286.022 | 286.042 | 285.978 | 285.880 | 285.878 | 18 |
| 19 | 285.821 | 285.828 | 285.834 | 285.818A | 286.088 | 286.114 | 286.085 | 286.034 | 286.038 | 285.977 | 285.881 | 285.878 | 19 |
| 20 | 285.823 | 285.828 | 285.834 | 285.101 | 286.088 | 286.114 | 286.083 | 286.035 | 286.036 | 285.976 | 285.880 | 285.878 | 20 |
| 21 | 285.824 | 285.825 | 285.835 | 285.103 | 286.100 | 286.118 | 286.081 | 286.056 | 286.037 | 285.971 | 285.881 | 285.878 | 21 |
| 22 | 285.823 | 285.826 | 285.835 | 285.104 | 286.100 | 286.118 | 286.078 | 286.071 | 286.033 | 285.968 | 285.883 | 285.878 | 22 |
| 23 | 285.823 | 285.827 | 285.834 | 285.108 | 286.097 | 286.126 | 286.074 | 286.071 | 286.030 | 285.968 | 285.886 | 285.878 | 23 |
| 24 | 285.824 | 285.827 | 285.834 | 285.111 | 286.097 | 286.131 | 286.068 | 286.069 | 286.026 | 285.967 | 285.868 | 285.878 | 24 |
| 25 | 285.825 | 285.827 | 285.834 | 285.112 | 286.098 | 286.130 | 286.063 | 286.062 | 286.017 | 285.965 | 285.867 | 285.878 | 25 |
| 26 | 285.828 | 285.826 | 285.833 | 285.108 | 286.106 | 286.130 | 286.055 | 286.060 | 286.016 | 285.964 | 285.867 | 285.878 | 26 |
| 27 | 285.828 | 285.827 | 285.832 | 285.108 | 286.112 | 286.128 | 286.052 | 286.059 | 286.016 | 285.963 | 285.868 | 285.878 | 27 |
| 28 | 285.828 | 285.828 | 285.834 | 285.128 | 286.114 | 286.124 | 286.050 | 286.060 | 286.011 | 285.961 | 285.868 | 285.878 | 28 |
| 29 | 285.828 | | 285.837 | 285.142 | 286.114 | 286.126 | 286.048 | 286.058 | 286.006 | 285.958 | 285.868 | 285.878 | 29 |
| 30 | 285.828 | | 285.841 | 285.144 | 286.114 | 286.128 | 286.048 | 286.052 | 286.006 | 285.954 | 285.869 | 285.878 | 30 |
| 31 | 285.828 | | 285.844 | | 286.115 | | 286.045 | 286.064 | | 285.952 | | 285.878 | 31 |
| MEAN | 285.818 | 285.825 | 285.833 | 285.858 | 286.117 | 286.117 | 286.092 | 286.048 | 286.048 | 285.978 | 285.868 | 285.874 | MEAN |
| MAX | 285.828 | 285.828 | 285.844 | 285.144 | 286.148 | 286.131 | 286.128 | 286.071 | 286.087 | 286.001 | 285.888 | 285.878 | MAX |
| MIN | 285.801 | 285.821 | 285.828 | 285.845 | 286.088 | 286.083 | 286.045 | 286.022 | 286.006 | 285.952 | 285.852 | 285.869 | MIN |

SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MEAN, 285.924
MAXIMUM DAILY, 286.148 ON MAY 3
MINIMUM DAILY, 285.801 ON JAN 1
MAXIMUM INSTANTANEOUS,
286.147 AT 16:59 CST ON MAY 3

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 10 05 N
LONG 98 59 13 W

A - MANUAL GAUGE

E - ESTIMATED

REGULATED SINCE 1959

DRAINAGE AREA,
854 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM 1928 ADJUSTMENT

REMARKS - PREVIOUS TO 1988 PUBLISHED UNDER THE NAME "ST. MALO RESERVOIR NEAR ST. MALO"

## STE. ROSE RESERVOIR NEAR STE. ROSE - STATION NO. 05LJ010

DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | 284.725E | 284.663E | --- | 282.403 | 284.685E | 284.218E | 284.785E | 284.675 | 284.614E | 284.685 | 284.615 | 1 |
| 2 | 284.775 | 284.728E | 284.680 | --- | 282.433E | 284.665 | 284.212E | 284.785 | 284.685E | 284.615E | 284.658E | 284.615E | 2 |
| 3 | 284.775E | 284.730 | 284.668E | --- | 282.443 | 284.658E | 284.205 | 284.780E | 284.658E | 284.622E | 284.662E | 284.615E | 3 |
| 4 | 284.775E | 284.730E | 284.658E | --- | 282.568E | 284.652E | 284.405E | 284.775 | 284.645 | 284.626E | 284.685 | 284.615E | 4 |
| 5 | 284.773E | 284.730E | 284.644E | --- | 282.883 | 284.645 | 284.605 | 284.775E | --- | 284.631E | 284.660E | 284.615 | 5 |
| 6 | 284.772 | 284.730 | 284.632E | --- | 283.284E | 284.645E | 284.708E | 284.782E | --- | 284.635 | 284.665 | 284.615E | 6 |
| 7 | 284.770E | 284.735E | 284.630 | --- | 284.034E | 284.645 | 284.805 | 284.785 | --- | 284.650E | 284.650E | 284.615E | 7 |
| 8 | 284.767E | 284.740E | 284.620E | --- | 284.705 | 284.675E | 284.645E | 284.780E | --- | 284.665 | 284.645 | 284.615 | 8 |
| 9 | 284.765E | 284.745E | 284.620E | --- | 284.780E | 284.905 | 284.685E | 284.785 | --- | 284.650E | 284.645E | 284.614E | 9 |
| 10 | 284.762 | 284.750 | 284.620 | --- | 284.855 | 284.815E | 284.925 | 284.785E | --- | 284.655E | 284.645 | 284.614E | 10 |
| 11 | 284.758E | 284.755E | 284.622E | --- | 284.858E | 284.832E | 284.905 | 284.785 | 284.640 | 284.650E | 284.642E | 284.613 | 11 |
| 12 | 284.748E | 284.780E | 284.625E | --- | 284.855 | 284.845 | 284.925 | 284.785E | --- | 284.645E | 284.634E | 284.611E | 12 |
| 13 | 284.741 | 284.785E | 284.625E | --- | 284.852E | 285.305 | 284.920E | 284.802E | --- | 284.640E | 284.635 | 284.609E | 13 |
| 14 | 284.738E | 284.770 | 284.630 | --- | 284.848E | 284.832E | 284.915 | 284.805 | --- | 284.635E | 284.635E | 284.607E | 14 |
| 15 | 284.734E | 284.770E | 284.630E | --- | 284.845 | 284.858E | --- | 284.815E | --- | 284.630E | 284.635 | 284.605 | 15 |
| 16 | 284.731 | 284.770E | 284.630E | --- | 284.845E | 284.185 | --- | 284.825 | --- | 261.635 | 284.632E | 284.605E | 16 |
| 17 | 284.728E | 284.770 | 284.630 | --- | 284.845 | 284.161E | --- | 284.820E | --- | 284.630E | 284.626E | 284.605E | 17 |
| 18 | 284.726E | 284.767E | 284.633E | --- | 284.845E | 284.137E | --- | 284.815 | --- | 284.635 | 284.625 | 284.605 | 18 |
| 19 | 284.724E | 284.743E | 284.637E | --- | 284.845 | 284.113E | --- | 284.812E | --- | 284.638E | 284.625E | 284.603E | 19 |
| 20 | 284.721 | 284.730 | 284.640 | --- | 284.845E | 284.088E | --- | 284.808E | --- | 284.635 | 284.625 | 284.600E | 20 |
| 21 | 284.718E | 284.730E | 284.644E | --- | 284.845E | 284.085 | --- | 284.805 | --- | 284.633E | 284.624 | 284.798E | 21 |
| 22 | 284.717E | 284.730E | 284.648E | --- | 284.845 | 284.185E | --- | 284.810E | --- | 284.632E | 284.631E | 284.795 | 22 |
| 23 | 284.715 | 284.730E | 284.652E | --- | 284.845E | 284.285 | --- | 284.815 | --- | 284.630E | 284.626E | 284.793E | 23 |
| 24 | 284.705 | 284.730 | 284.658E | --- | 284.845 | 284.282E | --- | 284.815E | --- | 284.626E | 284.625 | 284.790E | 24 |
| 25 | 284.708E | 284.717E | 284.660 | 282.581 | 284.858E | 284.258E | --- | 284.815 | 284.805 | 284.627E | 284.622E | 284.788E | 25 |
| 26 | 284.712E | 284.703E | 284.735E | 282.517E | 284.885 | 284.285 | --- | 284.818E | 284.805E | 284.625 | 284.618E | 284.785 | 26 |
| 27 | 284.715 | 284.680 | 284.810 | 282.473 | 284.890E | 284.250E | --- | 284.822E | 284.805 | 284.630E | 284.615 | 284.778E | 27 |
| 28 | 284.717E | 284.687E | --- | 282.463E | 284.915 | 284.245 | --- | 284.825 | 284.805E | 284.635E | 284.615E | 284.772E | 28 |
| 29 | 284.718E | | --- | 282.433 | 284.885E | 284.235E | --- | 284.805E | 284.805 | 284.640E | 284.615E | 284.765 | 29 |
| 30 | 284.720 | | --- | 282.416E | 284.882E | 284.225 | --- | 284.875 | 284.805E | 284.645 | 284.615E | --- | 30 |
| 31 | 284.723E | | --- | | 284.885 | | 284.805 | 284.875E | | 284.650E | | --- | 31 |
| MEAN | --- | 284.735 | --- | --- | 284.387 | 284.542 | --- | 284.805 | --- | 284.638 | 284.638 | --- | MEAN |
| MAX | --- | 284.770 | --- | --- | 284.915 | 285.305 | --- | 284.875 | --- | 284.685 | 284.685 | --- | MAX |
| MIN | --- | 284.687 | --- | --- | 282.403 | 284.085 | --- | 284.775 | --- | 284.614 | 284.615 | --- | MIN |

SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MAXIMUM DAILY, 285.305 ON JUN 13
MINIMUM DAILY, 282.403 ON MAY 1

TYPE OF GAUGE - MANUAL
LOCATION - LAT 51 03 00 N
LONG 98 31 48 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1968

DRAINAGE AREA,
1 110 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

REMARKS - PRIOR TO 1988 PUBLISHED AS "TURTLE RIVER ABOVE STE. ROSE DU LAC DAM"

## STEEPROCK RIVER NEAR MAFEKING - STATION NO. 05LP001

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.5228 | 0.6498 | 1.47 | 1.45 | 2.49 | 0.882 | 4.70 | 1.81 | --- | --- | 1 |
| 2 | --- | --- | 0.5228 | 0.6678 | 1.53 | 1.33 | 2.08 | 0.845 | 3.87 | 1.84 | --- | --- | 2 |
| 3 | --- | --- | 0.5228 | 0.6788 | 1.48 | 1.22 | 1.76 | 0.828 | 3.48 | 1.82 | --- | --- | 3 |
| 4 | --- | --- | 0.5228 | 0.6878 | 1.56 | 1.13 | 1.55 | 0.818 | 3.24 | 1.84 | --- | --- | 4 |
| 5 | --- | --- | 0.5228 | 0.6498 | 1.53 | 1.07 | 1.42 | 1.34 | 4.89 | 1.88 | --- | --- | 5 |
| 6 | --- | --- | 0.5148 | 0.6488 | 1.53 | 1.02 | 1.34 | 1.24 | 4.04 | 1.83 | --- | --- | 6 |
| 7 | --- | --- | 0.5148 | 0.6488 | 1.54 | 1.06 | 1.31 | 1.02 | 4.03 | 1.48 | --- | --- | 7 |
| 8 | --- | --- | 0.5148 | 0.6488 | 1.56 | 0.997 | 1.26 | 0.869 | 4.34 | 1.45 | --- | --- | 8 |
| 9 | --- | --- | 0.5148 | 0.6488 | 1.53 | 0.935 | 1.25 | 0.758 | 5.76 | 1.44 | --- | --- | 9 |
| 10 | --- | --- | 0.5448 | 0.6488 | 1.55 | 0.885 | 1.15 | 0.770 | 5.31 | 1.41 | --- | --- | 10 |
| 11 | --- | --- | 0.5448 | 0.6588 | 1.67 | 0.956 | 1.11 | 0.780 | 4.55 | 1.43 | --- | --- | 11 |
| 12 | --- | --- | 0.5448 | 0.6858 | 1.55 | 1.20 | 1.28 | 0.720 | 3.87 | 1.40 | --- | --- | 12 |
| 13 | --- | --- | 0.5448 | 0.7788 | 1.58 | 1.71 | 1.15 | 0.887 | 3.48 | 1.38 | --- | --- | 13 |
| 14 | --- | --- | 0.5448 | 0.8108 | 1.48 | 1.43 | 1.04 | 0.891 | 3.15 | 1.41 | --- | --- | 14 |
| 15 | --- | --- | 0.5518 | 0.8738 | 1.42 | 1.23 | 0.988 | 0.803 | 2.90 | 1.48 | --- | --- | 15 |
| 16 | --- | --- | 0.5518 | 0.8628 | 1.41 | 1.10 | 0.918 | 0.718 | 2.67 | 1.42 | --- | --- | 16 |
| 17 | --- | --- | 0.5518 | 0.9488 | 1.58 | 1.28 | 0.862 | 0.886 | 2.51 | 1.35 | --- | --- | 17 |
| 18 | --- | --- | 0.5518 | 1.38 B | 1.61 | 1.32 | 0.795 | 0.779 | 2.35 | 1.40 | --- | --- | 18 |
| 19 | --- | --- | 0.5518 | 1.88 B | 1.58 | 1.21 | 0.795 | 0.828 | 2.26 | 1.40 | --- | --- | 19 |
| 20 | --- | --- | 0.5518 | 2.55 B | 2.77 | 1.15 | 0.788 | 0.857 | 2.17 | 1.42 | --- | --- | 20 |
| 21 | --- | --- | 0.5588 | 3.27 B | 2.35 | 1.08 | 0.781 | 0.788 | 2.07 | 1.47 | --- | --- | 21 |
| 22 | --- | --- | 0.5588 | 4.08 E | 2.02 | 1.01 | 0.838 | 0.730 | 2.00 | 1.88 | --- | --- | 22 |
| 23 | --- | --- | 0.5588 | 3.98 A | 1.80 | 1.04 | 0.808 | 0.713 | 1.84 | 1.53 | --- | --- | 23 |
| 24 | --- | --- | 0.5588 | 2.61 | 2.01 | 1.47 | 0.887 | 0.867 | 1.92 | 1.45 | --- | --- | 24 |
| 25 | --- | --- | 0.5988 | 2.03 | 3.98 | 1.92 | 0.574 | 0.949 | 1.83 | 1.40 | --- | --- | 25 |
| 26 | --- | --- | 0.5988 | 1.84 | 3.42 | 4.06 | 0.558 | 1.32 | 1.77 | 1.38 | --- | --- | 26 |
| 27 | --- | --- | 0.5988 | 1.71 | 2.58 | 5.59 | 0.558 | 1.82 | 1.71 | 2.03 | --- | --- | 27 |
| 28 | --- | --- | 0.5988 | 1.83 | 2.28 | 4.84 | 0.527 | 5.72 | 1.81 | 2.80 | --- | --- | 28 |
| 29 | --- | | 0.5988 | 1.80 | 2.00 | 3.78 | 0.702 | 18.6 | 1.58 | 2.10 | --- | --- | 29 |
| 30 | --- | | 0.5988 | 1.44 | 1.75 | 2.98 | 0.713 | 9.84 | 1.52 | 1.83 | --- | --- | 30 |
| 31 | --- | | 0.5988 | | 1.58 | | 0.732 | 6.29 | | 1.77 | --- | --- | 31 |
| TOTAL | --- | --- | 17.100 | 41.482 | 58.24 | 51.733 | 33.158 | 84.203 | 93.72 | 48.25 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.552 | 1.38 | 1.88 | 1.72 | 1.04 | 2.07 | 3.12 | 1.58 | --- | --- | MEAN |
| MAX | --- | --- | 0.598 | 4.08 | 3.98 | 5.59 | 2.49 | 18.6 | 5.76 | 2.80 | --- | --- | MAX |
| MIN | --- | --- | 0.514 | 0.648 | 1.41 | 0.885 | 0.527 | 0.618 | 1.52 | 1.38 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 1.88
MAXIMUM DAILY, 18.6 ON AUG 29
MINIMUM DAILY, 0.5148 ON MAR 6
MAXIMUM INSTANTANEOUS,
22.6 AT 01:17 CST ON AUG 29

TYPE OF GAUGE - RECORDING
LOCATION - LAT 52 43 40 N
LONG 101 08 45 W
DRAINAGE AREA, 301 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
REGULATED SINCE 1958

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 2 780 |
| FEB | --- | AUG | 5 550 |
| MAR | 1 480 | SEP | 8 100 |
| APR | 3 580 | OCT | 4 170 |
| MAY | 5 030 | NOV | --- |
| JUN | 4 470 | DEC | --- |

TOTAL DISCHARGE, 35 200 dam³

## STEPHENFIELD LAKE NEAR STEPHENFIELD - STATION NO. 05GF008

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 294.036 | --- | 293.688 | 293.487 | 295.718 | 295.638 | 295.583 | 295.200 | 294.890 | 294.575 | 294.414 | 294.380 | 1 |
| 2 | 294.033A | --- | 293.686 | 293.516 | 295.710 | 295.623 | 295.572 | 295.187 | 294.875 | 294.563 | 294.410 | 294.363 | 2 |
| 3 | 294.038 | --- | 293.638A | 293.586 | 295.709 | 295.612 | 295.585 | 295.172 | 294.868 | 294.548 | 294.405 | 294.354 | 3 |
| 4 | 294.028 | --- | 293.586 | 293.694 | 295.698 | 295.601 | 295.540 | 295.159 | 294.859 | 294.535 | 294.407 | 294.356 | 4 |
| 5 | 294.032 | --- | 293.583 | 294.034 | 295.632 | 295.588 | 295.530 | 295.180 | 294.842 | 294.529 | 294.407 | 294.359 | 5 |
| 6 | 294.018 | --- | 293.577 | 294.478 | 295.615 | 295.581 | 295.514 | 295.184 | 294.838 | 294.516 | 294.406 | 294.363 | 6 |
| 7 | 294.016 | --- | 293.574 | 294.457 | 295.535 | 295.502 | 295.506 | 295.148 | 294.818 | 294.500 | 294.403 | 294.350 | 7 |
| 8 | 294.020A | --- | 293.571 | 295.238 | 295.648 | 295.501 | 295.488 | 295.138 | 294.803 | 294.489 | 294.412 | 294.350 | 8 |
| 9 | 294.013A | --- | 293.564 | 295.563 | 295.585 | 295.487 | 295.484 | 295.132 | 294.788 | 294.483 | 294.410 | 294.349 | 9 |
| 10 | 294.017A | --- | 293.556 | 295.772 | 295.580 | 295.595 | 295.472 | 295.122 | 294.771 | 294.470 | 294.412 | 294.341 | 10 |
| 11 | 294.007A | --- | 293.550 | 295.824 | 295.567 | 295.591 | 295.480 | 295.105 | 294.784 | 294.465 | 294.411 | 294.337A | 11 |
| 12 | 293.994 | --- | 293.547 | 295.807 | 295.560 | 295.600 | 295.480 | 295.078 | 294.780 | 294.457 | 294.408 | 294.330A | 12 |
| 13 | 293.982 | --- | 293.546 | 295.817 | 295.567 | 295.629 | 295.434 | 295.054 | 294.788 | 294.448 | 294.410 | 294.322A | 13 |
| 14 | 293.976 | --- | 293.531 | 295.862 | 295.581 | 295.652 | 295.416 | 295.029 | 294.780 | 294.448 | 294.404 | 294.319A | 14 |
| 15 | 293.970 | --- | 293.517 | 295.938 | 295.588 | 295.688 | 295.408 | 295.008 | 294.773 | 294.447 | 294.401 | 294.311A | 15 |
| 16 | 293.958 | --- | 293.515 | 295.973 | 295.587 | 295.672 | 295.385 | 294.986 | 294.780 | 294.448 | 294.395 | 294.311 | 16 |
| 17 | 293.953 | --- | 293.500 | 295.888 | 295.588 | 295.587 | 295.385 | 294.970 | 294.748 | 294.447 | 294.382 | 294.304A | 17 |
| 18 | 293.946 | --- | 293.494 | 295.838 | 295.591 | 295.568 | 295.371 | 294.977 | 294.733 | 294.448 | 294.380 | 294.292A | 18 |
| 19 | 293.941 | --- | 293.493 | 295.828 | 295.591 | 295.581 | 295.357 | 294.962 | 294.720 | 294.448 | 294.382 | 294.288A | 19 |
| 20 | 293.935 | --- | 293.488 | 295.864 | 295.590 | 295.653 | 295.345 | 294.974 | 294.712 | 294.448 | 294.380 | 294.285E | 20 |
| 21 | 293.934 | --- | 293.476 | 295.885 | 295.590 | 295.639 | 295.332 | 294.958 | 294.700 | 294.442 | 294.387 | 294.279A | 21 |
| 22 | 293.929 | 293.888A | 293.468 | 295.854 | 295.579 | 295.631 | 295.318 | 294.907 | 294.681 | 294.442 | 294.387 | 294.288A | 22 |
| 23 | 293.923 | 293.701 | 293.462 | 295.854 | 295.577 | 295.617 | 295.300 | 294.884 | 294.663 | 294.440 | 294.385 | 294.285 | 23 |
| 24 | 293.923A | 293.703 | 293.448 | 295.838 | 295.574 | 295.614 | 295.288 | 294.880 | 294.655 | 294.437 | 294.383 | 294.287 | 24 |
| 25 | 293.927 | 293.702 | 293.444 | 295.814 | 295.574 | 295.608 | 295.273 | 294.857 | 294.644 | 294.438 | 294.381 | 294.291 | 25 |
| 26 | 293.920 | 293.698 | 293.447 | 295.794 | 295.573 | 295.611 | 295.258 | 294.853 | 294.635 | 294.438 | 294.374 | 294.295 | 26 |
| 27 | 293.923 | 293.698 | 293.471 | 295.769 | 295.570 | 295.595 | 295.240 | 294.840 | 294.625 | 294.437 | 294.371 | 294.288 | 27 |
| 28 | 293.918 | 293.693 | 293.477 | 295.743 | 295.562 | 295.590 | 295.233 | 294.840 | 294.616 | 294.431 | 294.368 | 294.283 | 28 |
| 29 | 293.911 | | 293.478 | 295.735 | 295.566 | 295.589 | 295.217 | 294.833 | 294.599 | 294.429 | 294.363 | 294.248A | 29 |
| 30 | 293.910 | | 293.484 | 295.729 | 295.563 | 295.590 | 295.211 | 294.815 | 294.589 | 294.424 | 294.383 | 294.258 | 30 |
| 31 | 293.908A | | 293.478 | | 295.548 | | 295.208 | 294.808 | | 294.418 | | 294.238 | 31 |
| MEAN | 293.988 | --- | 293.527 | 295.362 | 295.673 | 295.630 | 295.392 | 295.037 | 294.745 | 294.487 | 294.395 | 294.305 | MEAN |
| MAX | 294.038 | --- | 293.588 | 295.973 | 295.718 | 295.672 | 295.583 | 295.200 | 294.890 | 294.575 | 294.414 | 294.380 | MAX |
| MIN | 293.908 | --- | 293.444 | 293.487 | 295.618 | 295.588 | 295.208 | 294.808 | 294.588 | 294.418 | 294.383 | 294.238 | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MAXIMUM DAILY, 295.973 ON APR 16
MINIMUM DAILY, 293.444 ON MAR 25
MAXIMUM INSTANTANEOUS,
295.008 AT 13:40 CST ON APR 16

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 31 37 N
LONG 99 16 49 W

A - MANUAL GAUGE
E - ESTIMATED
REGULATED SINCE 1984
DRAINAGE AREA,
948 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

REMARKS - PREVIOUS TO 1988 PUBLISHED UNDER THE NAME "STEPHENFIELD RESERVOIR NEAR STEPHENFIELD"

## STONY CREEK NEAR BROOMHILL - STATION NO. 05NG010

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0 | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0 | 0.0908 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0 | 1.51 B | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0 | 0.8078 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0 | 0.333 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0 | 0.147 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0 | 0.078 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0 | 0.049A | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0 | 0.033A | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0 | 0.018 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0 | 0.004 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 3.736 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.125 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 1.51 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.015
MAXIMUM DAILY, 1.510 ON APR 3
MINIMUM DAILY, 0 ON MAR 1
MAXIMUM INSTANTANEOUS,
2.080 AT 12:01 CST ON APR 3

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 33 52 N
LONG 101 05 54 W
DRAINAGE AREA, 480 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 323 | OCT | 0 |
| MAY | 0 | NOV | --- |
| JUN | 0 | DEC | --- |

TOTAL DISCHARGE, 323 dam³

## STONY CREEK NEAR NEEPAWA - STATION NO. 05LL003

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0 B | 0.0708 | 0.058 | 0.033 | 0.051 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0 B | 0.1038 | 0.061 | 0.047 | 0.028 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0 B | 0.2048 | 0.060 | 0.038 | 0.018 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0 B | 0.1208 | 0.060 | 0.024 | 0.010 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0 B | 0.3408 | 0.061 | 0.022 | 0.008 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0 B | 0.2888 | 0.047 | 0.022 | 0.008 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0 B | 0.1208 | 0.060 | 0.048 | 0.003 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0 B | 0.0788 | 0.062 | 0.063 | 0.004 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0 B | 0.0638 | 0.070 | 0.062 | 0.020 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0 B | 0.0888 | 0.088 | 0.038 | 0.051 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0.0038 | 0.0888 | 0.071 | 0.057 | 0.042 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0.0038 | 0.0718 | 0.088 | 0.071 | 0.083 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0.0028 | 0.0728 | 0.071 | 0.143 | 0.057 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0.0018 | 0.0788 | 0.080 | 0.187 | 0.050 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0 B | 0.0778 | 0.082 | 0.084 | 0.021 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0 B | 0.0628 | 0.086 | 0.058 | 0.010 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0 B | 0.0888 | 0.043 | 0.048 | 0.008 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0 B | 0.1268 | 0.103 | 0.038 | 0.003 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0 B | 0.1878 | 0.108 | 0.028 | 0.001 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0 B | 0.144 | 0.088 | 0.015 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0 B | 0.181 | 0.107 | 0.011 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0 B | 0.144 | 0.078 | 0.007 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0 B | 0.188 | 0.082 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0 B | 0.138 | 0.088 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0.0018 | 0.118 | 0.072 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0.0058 | 0.108 | 0.072 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0.0048 | 0.088 | 0.081 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0.0038 | 0.087 | 0.080 | 0.002 | 0 | 0 | 0 | 0.001 | --- | --- | 28 |
| 29 | --- | | 0.0038 | 0.080 | 0.043 | 0.040 | 0 | 0 | 0 | 0.014 | --- | --- | 29 |
| 30 | --- | | 0.0188 | 0.088 | 0.037 | 0.073 | 0 | 0 | 0 | 0.013 | --- | --- | 30 |
| 31 | --- | | 0.0878 | | 0.038 | | 0 | 0 | | 0.010 | | --- | 31 |
| TOTAL | --- | --- | 0.100 | 3.597 | 2.072 | 1.288 | 0.472 | 0 | 0 | 0.038 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.003 | 0.120 | 0.067 | 0.043 | 0.015 | 0 | 0 | 0.001 | --- | --- | MEAN |
| MAX | --- | --- | 0.007 | 0.340 | 0.108 | 0.187 | 0.083 | 0 | 0 | 0.014 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.063 | 0.038 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | MIN |

SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.031
MAXIMUM DAILY, 0.3408 ON APR 5
MINIMUM DAILY, 0B ON MAR 1

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 13 55 N
LONG 99 34 00 W
DRAINAGE AREA, 183 km²
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 40.8 |
| FEB | --- | AUG | 0 |
| MAR | 0.84 | SEP | 0 |
| APR | 311 | OCT | 3.36 |
| MAY | 179 | NOV | --- |
| JUN | 108 | DEC | --- |

TOTAL DISCHARGE, 663 dam³

REMARKS - PREVIOUS TO 1988 PUBLISHED UNDER THE NAME "NEEPAWA CREEK NEAR NEEPAWA"

## SWAN CREEK NEAR LUNDAR - STATION NO. 05LN003

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 E | 0 | 0 | 0.173 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0.0108 | 0 | 0 | 0.148 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0.0088 | 0 | 0 | 0.132 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0.0268 | 0 | 0 | 0.118 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0.0828 | 0 | 0 | 0.118 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0.083 | 0 | 0 | 0.087 | 0 | 0.031 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.084 | 0 | 0.018 | 0.084 | 0 | 0.031 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.073 | 0 | 0.022 | 0.070 | 0 | 0.018 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.018 | 0 | 0.018 | 0.084 | 0 | 0.014 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.012 | 0 | 0.014 | 0.083 | 0 | 0.010 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.009 | 0 | 0.028 | 0.041 | 0 | 0.008 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.008 | 0 | 0.547 | 0.037 | 0 | 0.005 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.018 | 0 | 0.888 | 0.024 | 0 | 0.009 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.031 | 0 | 0.511 | 0.018 | 0 | 0.087 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.042 | 0 | 0.397 | 0.011 | 0 | 0.012 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.026 | 0 | 0.208 | 0.007 | 0 | 0.004 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.010 | 0 | 0.200 | 0.004 | 0 | 0.002 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.014 | 0 | 0.448 | 0.001 | 0 | 0.002 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.008 | 0 | 0.882 | 0.001 | 0 | 0.002 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.010 | 0 | 0.722 | 0.001 | 0 | 0.002 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.008 | 0 | 0.838 | 0.001 | 0 | 0.002 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.011 | 0 | 0.538 | 0 | 0 | 0.002 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.014 | 0 | 0.455 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.008 | 0 | 0.370 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.006 | 0.002 | 0.302 | 0 | 0 | 0.001 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.002 | 0.010 | 0.253 | 0 | 0 | 0 | 0A | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.001 | 0.004 | 0.344 | 0 | 0 | 0 | 0E | --- | --- | 27 |
| 28 | --- | --- | 0B | 0 | 0.004 | 0.225 | 0 | 0 | 0 | 0E | --- | --- | 28 |
| 29 | --- | | 0B | 0 | 0.001 | 0.205 | 0 | 0.002 | 0 | 0E | --- | --- | 29 |
| 30 | --- | | 0B | 0 | 0 | 0.182 | 0 | 0.001 | 0 | 0E | --- | --- | 30 |
| 31 | --- | | 0B | | 0 | | 0 | 0 | | 0E | | --- | 31 |
| TOTAL | --- | --- | 0 | 0.898 | 0.021 | 7.985 | 1.158 | 0.003 | 0.220 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.033 | 0.001 | 0.266 | 0.039 | 0 | 0.007 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.095 | 0.010 | 0.888 | 0.173 | 0.002 | 0.087 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.041
MAXIMUM DAILY, 0.888 ON JUN 13
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
0.942 AT 10:51 CST ON JUN 13

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 43 17 N
LONG 98 05 24 W
DRAINAGE AREA, 723 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 104 |
| FEB | --- | AUG | 0.26 |
| MAR | 0 | SEP | 19.0 |
| APR | 60.0 | OCT | 0 |
| MAY | 1.81 | NOV | --- |
| JUN | 890 | DEC | --- |

TOTAL DISCHARGE, 875 dam³

REMARKS - PREVIOUS TO 1988 PUBLISHED UNDER THE NAME "BURNT LAKE DRAIN NO. 2 NEAR LUNDAR"

## SWAN LAKE NEAR NOVRA - STATION NO. 05LE007

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 258.601 | 258.557 | 258.483 | 258.381 | 258.425 | 258.408 | --- | --- | 1 |
| 2 | --- | --- | --- | --- | 258.610 | 258.583 | 258.485 | 258.390 | 258.437 | 258.405 | --- | --- | 2 |
| 3 | --- | --- | --- | --- | 258.617 | 258.550 | 258.458 | 258.395 | 258.448 | 258.402 | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 258.607 | 258.578 | 258.508 | 258.323 | 258.431 | 258.401 | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 258.635 | 258.543 | 258.476 | 258.336 | 258.449 | 258.345 | --- | --- | 5 |
| 6 | --- | --- | --- | --- | 258.632 | 258.540 | 258.503 | 258.395 | 258.447 | 258.381 | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 258.634 | 258.582 | 258.486 | 258.403 | 258.422 | 258.459 | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 258.634 | 258.574 | 258.458 | 258.402 | 258.426 | 258.451 | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 258.645 | 258.580 | 258.436 | 258.393 | 258.351 | 258.416 | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 258.688 | 258.574 | 258.471 | 258.396 | 258.428 | 258.450 | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 258.688 | 258.686 | 258.488 | 258.396 | 258.434 | 258.403 | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 258.670 | 258.600 | 258.478 | 258.388 | 258.480 | 258.466 | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 258.683 | 258.536 | 258.478 | 258.388 | 258.470 | 258.480 | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 258.640 | 258.547 | 258.470 | 258.373 | 258.474 | 258.458 | --- | --- | 14 |
| 15 | --- | --- | --- | --- | 258.630 | 258.539 | 258.488 | 258.387 | 258.453 | 258.422 | --- | --- | 15 |
| 16 | --- | --- | --- | --- | 258.637 | 258.556 | 258.470 | 258.383 | 258.502 | 258.457 | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 258.643 | 258.521 | 258.485 | 258.377 | 258.473 | 258.445 | --- | --- | 17 |
| 18 | --- | --- | --- | --- | 258.643 | 258.506 | 258.484 | 258.388 | 258.436 | 258.481 | --- | --- | 18 |
| 19 | --- | --- | --- | 258.650A | 258.649 | 258.509 | 258.484 | 258.388 | 258.508 | 258.480 | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 258.616 | 258.477 | 258.458 | 258.386 | 258.484 | 258.487 | --- | --- | 20 |
| 21 | --- | --- | --- | --- | 258.608 | 258.474 | 258.453 | 258.421 | 258.431 | 258.478 | --- | --- | 21 |
| 22 | --- | --- | --- | --- | 258.678 | 258.477 | 258.444 | 258.423 | 258.396 | 258.480 | --- | --- | 22 |
| 23 | --- | --- | --- | --- | 258.600 | 258.486 | 258.400 | 258.427 | 258.495 | 258.484 | --- | --- | 23 |
| 24 | --- | --- | --- | --- | 258.618 | 258.486 | 258.434 | 258.413 | 258.433 | 258.486 | --- | --- | 24 |
| 25 | --- | --- | --- | --- | 258.650 | 258.452 | 258.400 | 258.408 | 258.437 | 258.459 | --- | --- | 25 |
| 26 | --- | --- | --- | --- | 258.665 | 258.475 | 258.332 | 258.381 | 258.480 | 258.451 | --- | --- | 26 |
| 27 | --- | --- | --- | --- | 258.648 | 258.527 | 258.387 | 258.331 | 258.470 | 258.403 | --- | --- | 27 |
| 28 | --- | --- | --- | 258.678A | 258.685 | 258.552 | 258.386 | 258.382 | 258.432 | 258.452 | --- | --- | 28 |
| 29 | --- | | --- | 258.677 | 258.652 | 258.524 | 258.374 | 258.387 | 258.472 | 258.456 | --- | --- | 29 |
| 30 | --- | | --- | 258.681 | 258.678 | 258.496 | 258.374 | 258.409 | 258.489 | 258.492 | --- | --- | 30 |
| 31 | --- | | --- | | 258.677 | | 258.388 | 258.413 | | 258.485 | | --- | 31 |
| MEAN | --- | --- | --- | --- | 258.637 | 258.527 | 258.444 | 258.384 | 258.469 | 258.445 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 258.688 | 258.583 | 258.508 | 258.427 | 258.508 | 258.492 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 258.600 | 258.452 | 258.322 | 258.323 | 258.351 | 258.345 | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MAXIMUM DAILY, 258.696 ON MAY 10
MINIMUM DAILY, 258.322 ON JUL 26
MAXIMUM INSTANTANEOUS,
258.746 AT 16:15 CST ON MAY 10

TYPE OF GAUGE - RECORDING
LOCATION - LAT 52 32 00 N
LONG 100 52 00 W

A - MANUAL GAUGE

DRAINAGE AREA,
10 000 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1962 ADJ.)

## SWAN LAKE NEAR SWAN LAKE - STATION NO. 05UB010

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | 0.178 | 0.878 | 0.794 | 0.747 | 0.619 | 0.525 | 0.491 | 0.481 | --- | 1 |
| 2 | --- | --- | --- | 0.181 | 0.878 | 0.786 | 0.738 | 0.610 | 0.525 | 0.485 | 0.483A | --- | 2 |
| 3 | --- | --- | --- | 0.184 | 0.874 | 0.777 | 0.730 | 0.612 | 0.530 | 0.486 | --- | --- | 3 |
| 4 | --- | --- | --- | 0.213 | 0.872 | 0.767 | 0.728 | 0.608 | 0.525 | 0.489 | --- | --- | 4 |
| 5 | --- | --- | --- | 0.200 | 0.869 | 0.764 | 0.724 | 0.598 | 0.525 | 0.488 | --- | --- | 5 |
| 6 | --- | --- | --- | 0.189 | 0.880 | 0.773 | 0.718 | 0.601 | 0.518 | 0.485 | --- | --- | 6 |
| 7 | --- | --- | --- | 0.171 | 0.882 | 0.778 | 0.713 | 0.597 | 0.510 | 0.488 | --- | --- | 7 |
| 8 | --- | --- | --- | 0.184 | 0.885 | 0.788 | 0.717 | 0.583 | 0.504 | 0.488 | --- | --- | 8 |
| 9 | --- | --- | --- | 0.185 | 0.881 | 0.785 | 0.720 | 0.581 | 0.498 | 0.485 | --- | --- | 9 |
| 10 | --- | --- | --- | 0.185 | 0.889 | 0.782 | 0.718 | 0.577 | 0.488 | 0.488 | --- | --- | 10 |
| 11 | --- | --- | --- | 0.208 | 0.881 | 0.788 | 0.715 | 0.574 | 0.538 | 0.480 | --- | --- | 11 |
| 12 | --- | --- | --- | 0.272 | 0.843 | 0.773 | 0.710 | 0.578 | 0.546 | 0.478 | --- | --- | 12 |
| 13 | --- | --- | --- | 0.343 | 0.838 | 0.783 | 0.708 | 0.574 | 0.547 | 0.478 | --- | --- | 13 |
| 14 | --- | --- | --- | 0.415 | 0.830 | 0.783 | 0.702 | 0.574 | 0.547 | 0.477 | --- | --- | 14 |
| 15 | --- | --- | --- | 0.485 | 0.813 | 0.780 | 0.697 | 0.572 | 0.548 | 0.474 | --- | --- | 15 |
| 16 | --- | --- | 0.080A | 0.554 | 0.908 | 0.780 | 0.693 | 0.567 | 0.548 | 0.473 | --- | --- | 16 |
| 17 | --- | --- | 0.049 | 0.632 | 0.900 | 0.772 | 0.688 | 0.564 | 0.544 | 0.470 | --- | --- | 17 |
| 18 | --- | --- | 0.048 | 0.688 | 0.900 | 0.765 | 0.682 | 0.563 | 0.533 | 0.488 | --- | --- | 18 |
| 19 | --- | --- | 0.044 | 0.737 | 0.893 | 0.762 | 0.678 | 0.561 | 0.534 | 0.488 | --- | --- | 19 |
| 20 | --- | --- | 0.043 | 0.780 | 0.880 | 0.757 | 0.675 | 0.558 | 0.533 | 0.488 | --- | --- | 20 |
| 21 | --- | --- | 0.043 | 0.845 | 0.875 | 0.748 | 0.672 | 0.559 | 0.530 | 0.488 | --- | --- | 21 |
| 22 | --- | --- | 0.040 | 0.870E | 0.883 | 0.739 | 0.664 | 0.557 | 0.520 | 0.488 | --- | --- | 22 |
| 23 | --- | --- | 0.039 | 0.880E | 0.883 | 0.737 | 0.658 | 0.558 | 0.530 | 0.484 | --- | --- | 23 |
| 24 | --- | --- | 0.037 | 0.900E | 0.857 | 0.735 | 0.650 | 0.555 | 0.515 | 0.488 | --- | --- | 24 |
| 25 | --- | --- | 0.035 | 0.923E | 0.844 | 0.748 | 0.644 | 0.549 | 0.510 | 0.484 | --- | --- | 25 |
| 26 | --- | --- | 0.033 | 0.943E | 0.841 | 0.738 | 0.636 | 0.542 | 0.508 | 0.488 | --- | --- | 26 |
| 27 | --- | --- | 0.030 | 0.964E | 0.838 | 0.734 | 0.628 | 0.542 | 0.506 | 0.484 | --- | --- | 27 |
| 28 | --- | --- | 0.028 | 0.970A | 0.828 | 0.738 | 0.628 | 0.538 | 0.500 | 0.488 | --- | --- | 28 |
| 29 | --- | | 0.032 | 0.974 | 0.818 | 0.744 | 0.621 | 0.528 | 0.501 | 0.480 | --- | --- | 29 |
| 30 | --- | | 0.138 | 0.974 | 0.810 | 0.748 | 0.620 | 0.530 | 0.501 | 0.481 | --- | --- | 30 |
| 31 | --- | | 0.189 | | 0.804 | | 0.631 | 0.528 | | 0.488 | | --- | 31 |
| MEAN | --- | --- | --- | 0.843 | 0.805 | 0.762 | 0.685 | 0.589 | 0.533 | 0.474 | --- | --- | MEAN |
| MAX | --- | --- | --- | 0.974 | 0.878 | 0.794 | 0.747 | 0.619 | 0.547 | 0.491 | --- | --- | MAX |
| MIN | --- | --- | --- | 0.189 | 0.804 | 0.734 | 0.630 | 0.526 | 0.498 | 0.488 | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MAXIMUM DAILY, 0.978 ON MAY 2
MINIMUM DAILY, 0.028 ON MAR 28
MAXIMUM INSTANTANEOUS,
0.881 AT 14:29 CST ON MAY 4

WATER LEVELS ARE REFERRED TO ASSUMED DATUM

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 21 30 N
LONG 98 54 00 W

A - MANUAL GAUGE

E - ESTIMATED

DRAINAGE AREA,
4 880 km²

## SWAN RIVER NEAR MINITONAS - STATION NO. 05LE005

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.373B | 0.271B | 0.175B | 0.330B | 4.88E | 4.40 | 3.70 | 0.502 | 0.614 | 1.38 | 1.89 | 0.818B | 1 |
| 2 | 0.373B | 0.267B | 0.175B | 0.364B | 4.18E | 3.98 | 3.86 | 0.508 | 0.980 | 1.32 | 1.85 B | 0.809B | 2 |
| 3 | 0.369B | 0.264B | 0.175B | 0.400B | 3.68A | 3.80 | 3.77 | 0.643 | 1.15 | 1.28 | 1.82 B | 0.887B | 3 |
| 4 | 0.364B | 0.260B | 0.175B | 0.439B | 3.17E | 3.32 | 3.63 | 0.612 | 2.31 | 1.21 | 1.78 B | 0.867B | 4 |
| 5 | 0.360B | 0.269B | 0.175B | 0.458B | 2.77 | 3.08 | 3.17 | 0.682 | 2.68 | 1.19 | 1.76 B | 0.877B | 5 |
| 6 | 0.360B | 0.253B | 0.175B | 0.480B | 3.49 | 2.81 | 2.78 | 0.617 | 2.58 | 1.15 | 1.72 B | 0.888B | 6 |
| 7 | 0.356B | 0.249B | 0.175B | 0.503B | 2.93 | 2.73 | 3.40 | 0.477 | 2.30 | 1.10 | 1.66 B | 0.868B | 7 |
| 8 | 0.352B | 0.246B | 0.175B | 0.530B | 2.10 | 2.44 | 3.11 | 0.432 | 2.20 | 1.08 | 1.64 B | 0.848B | 8 |
| 9 | 0.352B | 0.242B | 0.170B | 0.598B | 1.86 | 2.21 | 1.83 | 0.373 | 2.80 | 1.05 | 1.61 B | 0.835B | 9 |
| 10 | 0.348B | 0.239B | 0.170B | 0.810B | 1.83 | 1.84 | 1.72 | 0.311 | 2.48 | 1.01 | 1.57 B | 0.825B | 10 |
| 11 | 0.348B | 0.235B | 0.170B | 1.35 B | 1.78 | 2.21 | 1.61 | 0.287 | 2.30 | 0.984 | 1.54 B | 0.815B | 11 |
| 12 | 0.341B | 0.232B | 0.170B | 1.81 B | 1.78 | 2.37 | 1.61 | 0.304 | 2.27 | 0.958 | 1.50 B | 0.804B | 12 |
| 13 | 0.338B | 0.228B | 0.170B | 2.39 B | 1.88 | 2.19 | 1.51 | 0.384 | 2.53 | 0.951 | 1.47 B | 0.784B | 13 |
| 14 | 0.334B | 0.226B | 0.170B | 2.84 B | 1.84 | 2.04 | 1.36 | 0.407 | 3.01 | 1.04 | 1.43 B | 0.783B | 14 |
| 15 | 0.331B | 0.221B | 0.170B | 2.84 B | 1.81 | 2.02 | 1.48 | 0.344 | 3.18 | 1.30 | 1.40 B | 0.773B | 15 |
| 16 | 0.327B | 0.217B | 0.170B | 3.81 B | 1.80 | 2.09 | 1.33 | 0.283 | 3.18 | 1.18 | 1.37 B | 0.763B | 16 |
| 17 | 0.324B | 0.214B | 0.170B | 3.06 B | 1.82 | 2.38 | 1.18 | 0.278 | 3.06 | 1.18 | 1.33 B | 0.752B | 17 |
| 18 | 0.320B | 0.210B | 0.170B | 2.86 B | 1.88 | 2.32 | 1.14 | 0.488 | 2.98 | 1.15 | 1.30 B | 0.742B | 18 |
| 19 | 0.317B | 0.207B | 0.170B | 5.90 B | 1.84 | 2.14 | 1.10 | 0.434 | 2.92 | 1.14 | 1.26 B | 0.732B | 19 |
| 20 | 0.313B | 0.203B | 0.176B | 8.90 B | 1.78 | 1.83 | 1.04 | 0.284 | 2.78 | 1.18 | 1.23 B | 0.721B | 20 |
| 21 | 0.310B | 0.200B | 0.182B | 11.5 B | 1.81 | 1.70 | 1.04 | 0.244 | 2.48 | 1.18 | 1.19 B | 0.711B | 21 |
| 22 | 0.306B | 0.196B | 0.186B | 13.5 B | 2.47 | 1.83 | 1.02 | 0.228 | 2.13 | 1.22 | 1.16 B | 0.701B | 22 |
| 23 | 0.302B | 0.193B | 0.186B | 12.2 B | 2.80 | 1.48 | 0.824 | 0.281 | 1.88 | 1.26 | 1.12 B | 0.890B | 23 |
| 24 | 0.299B | 0.189B | 0.186B | 9.44 E | 3.20 | 1.43 | 0.613 | 0.447 | 1.61 | 1.48 | 1.08 B | 0.861B | 24 |
| 25 | 0.295B | 0.186B | 0.203B | 7.40 E | 3.83 | 1.30 | 0.781 | 0.449 | 1.74 | 1.45 | 1.05 B | 0.870B | 25 |
| 26 | 0.292B | 0.183B | 0.213B | 6.67 E | 3.84 | 1.87 | 0.708 | 0.478 | 1.83 | 1.38 | 1.02 B | 0.880B | 26 |
| 27 | 0.288B | 0.179B | 0.221B | 6.83 E | 3.88 | 1.83 | 0.643 | 0.308 | 1.81 | 1.88 | 0.984B | 0.849B | 27 |
| 28 | 0.285B | 0.176B | 0.240B | 6.98 E | 3.89 | 1.47 | 0.596 | 0.433 | 1.72 | 1.84 | C.949B | 0.838B | 28 |
| 29 | 0.281B | | 0.268B | 8.08 E | 5.30 | 1.88 | 0.588 | 1.32 | 1.60 | 1.88 | 0.938B | 0.826B | 29 |
| 30 | 0.278B | | 0.278B | 8.84 E | 8.24 | 2.08 | 0.588 | 0.718 | 1.43 | 1.88 | 0.928B | 0.813B | 30 |
| 31 | 0.274B | | 0.309B | | 4.88 | | 0.606 | 0.830 | | 1.82 | | 0.806B | 31 |
| TOTAL | 10.107 | 8.238 | 8.817 | 123.484 | 88.82 | 88.13 | 80.148 | 14.384 | 67.034 | 40.171 | 41.670 | 23.648 | TOTAL |
| MEAN | 0.328 | 0.223 | 0.181 | 4.13 | 2.78 | 2.27 | 1.82 | 0.483 | 2.24 | 1.30 | 1.38 | 0.783 | MEAN |
| MAX | 0.373 | 0.271 | 0.309 | 13.5 | 5.30 | 4.40 | 3.86 | 1.32 | 3.18 | 1.84 | 1.89 | 0.918 | MAX |
| MIN | 0.274 | 0.176 | 0.170 | 0.330 | 1.80 | 1.30 | 0.606 | 0.228 | 0.614 | 0.958 | 0.928 | 0.806 | MIN |

### SUMMARY FOR THE YEAR 1989

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 1.47
MAXIMUM DAILY, 13.5B ON APR 22
MINIMUM DAILY, 0.170B ON MAR 5

TYPE OF GAUGE - RECORDING
LOCATION - LAT 52 11 47 N
LONG 101 02 37 W
DRAINAGE AREA, 4 230 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 873 | JUL | 4 330 |
| FEB | 538 | AUG | 1 240 |
| MAR | 811 | SEP | 5 780 |
| APR | 10 700 | OCT | 3 470 |
| MAY | 7 480 | NOV | 3 580 |
| JUN | 5 880 | DEC | 2 040 |

TOTAL DISCHARGE, 45 800 dam³

## TAYLOR RIVER NEAR THOMPSON - STATION NO. 05TG002

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1969

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.488 | 1.288 | 1.188 | 1.108 | --- | 9.98 | 1.08 | --- | --- | 0.853E | 0.880B | 0.880B | 1 |
| 2 | 1.488 | 1.288 | 1.188 | 1.108 | --- | 9.38 | 0.882 | --- | --- | 0.826E | 0.877B | 0.880B | 2 |
| 3 | 1.488 | 1.278 | 1.178 | 1.108 | --- | 8.78 | 0.802 | --- | --- | 0.818E | 0.874B | 0.880B | 3 |
| 4 | 1.488 | 1.278 | 1.178 | 1.108 | --- | 8.31 | 0.635 | --- | --- | 0.816E | 0.868B | 0.880B | 4 |
| 5 | 1.488 | 1.288 | 1.188 | 1.108 | --- | 8.08 | 0.449 | --- | --- | 0.821E | 0.868B | 0.880B | 5 |
| 6 | 1.448 | 1.258 | 1.188 | 1.108 | --- | 7.81 | 0.321A | --- | --- | 0.807E | 0.868B | 0.880B | 6 |
| 7 | 1.448 | 1.268 | 1.168 | 1.108 | --- | 7.26 | 0.248 | --- | --- | 0.826E | 0.868B | 0.880B | 7 |
| 8 | 1.428 | 1.258 | 1.168 | 1.108 | --- | 6.80 | 0.195 | --- | --- | 0.807E | 0.865B | 0.880B | 8 |
| 9 | 1.428 | 1.258 | 1.168 | 1.108 | --- | 6.63 | 0.130 | --- | --- | 0.780E | 0.868B | 0.880B | 9 |
| 10 | 1.418 | 1.248 | 1.168 | 1.108 | --- | 7.38 | 0.128 | --- | --- | 0.818E | 0.862B | 0.880B | 10 |
| 11 | 1.408 | 1.238 | 1.158 | 1.108 | --- | 7.13 | 0.128A | --- | --- | 0.826E | 0.862B | 0.880B | 11 |
| 12 | 1.408 | 1.238 | 1.158 | 1.108 | --- | 6.86 | --- | --- | --- | 0.826E | 0.862B | 0.880B | 12 |
| 13 | 1.408 | 1.228 | 1.158 | 1.108 | --- | 6.31 | --- | --- | --- | 0.832E | 0.862B | 0.880B | 13 |
| 14 | 1.398 | 1.228 | 1.158 | 1.108 | --- | 5.84 | --- | --- | --- | 0.832E | 0.858B | 0.880B | 14 |
| 15 | 1.388 | 1.218 | 1.158 | 1.108 | --- | 5.33 | --- | --- | --- | 0.832E | 0.858B | 0.880B | 15 |
| 16 | 1.378 | 1.218 | 1.158 | 1.108 | --- | 4.86 | --- | --- | --- | 0.818E | 0.858B | 0.847B | 16 |
| 17 | 1.388 | 1.218 | 1.158 | 1.108 | --- | 4.48 | --- | --- | --- | 0.780E | 0.858B | 0.847B | 17 |
| 18 | 1.388 | 1.208 | 1.158 | 1.108 | --- | 4.18 | --- | --- | --- | 0.789A | 0.858B | 0.847B | 18 |
| 19 | 1.358 | 1.208 | 1.148 | 1.108 | --- | 3.88 | --- | --- | --- | 0.788 | 0.858B | 0.847B | 19 |
| 20 | 1.358 | 1.208 | 1.148 | 1.108 | --- | 3.67 | --- | --- | --- | 0.773 | 0.858B | 0.847B | 20 |
| 21 | 1.358 | 1.208 | 1.148 | 1.128 | --- | 3.42 | --- | --- | --- | 0.782 | 0.858B | 0.847B | 21 |
| 22 | 1.348 | 1.208 | 1.138 | 1.328 | --- | 3.16 | --- | --- | --- | 0.787 | 0.858B | 0.847B | 22 |
| 23 | 1.348 | 1.208 | 1.138 | 1.888 | 13.3A | 2.78 | --- | --- | --- | 0.761 | 0.858B | 0.847B | 23 |
| 24 | 1.338 | 1.208 | 1.128 | 1.828 | 13.3 | 2.39 | --- | --- | --- | 0.714 | 0.858B | 0.847B | 24 |
| 25 | 1.328 | 1.208 | 1.128 | 2.138 | 12.8 | 2.07 | --- | --- | --- | 0.708 | 0.858B | 0.847B | 25 |
| 26 | 1.318 | 1.198 | 1.128 | 2.638 | 12.4 | 2.00 | --- | --- | --- | 0.884 | 0.858B | 0.847B | 26 |
| 27 | 1.318 | 1.198 | 1.118 | 3.188 | 12.2 | 1.82 | --- | --- | --- | 0.882B | 0.850B | 0.847B | 27 |
| 28 | 1.308 | 1.188 | 1.118 | 3.778 | 12.1 | 1.70 | --- | --- | 0.882E | 0.880B | 0.850B | 0.844B | 28 |
| 29 | 1.308 | | 1.118 | 4.358 | 12.0 | 1.58 | --- | --- | 0.880E | 0.880B | 0.850B | 0.844B | 29 |
| 30 | 1.308 | | 1.118 | 4.928 | 11.7 | 1.44 | --- | --- | 0.853E | 0.880B | 0.850B | 0.844B | 30 |
| 31 | 1.308 | | 1.108 | | 10.7 | | --- | --- | | 0.880B | | 0.844B | 31 |
| TOTAL | 42.67 | 34.31 | 35.44 | 48.78 | --- | 154.88 | --- | --- | --- | 24.088 | 19.803 | 20.090 | TOTAL |
| MEAN | 1.38 | 1.23 | 1.14 | 1.63 | --- | 5.18 | --- | --- | --- | 0.777 | 0.880 | 0.848 | MEAN |
| MAX | 1.48 | 1.28 | 1.18 | 4.92 | --- | 9.98 | --- | --- | --- | 0.853 | 0.880 | 0.880 | MAX |
| MIN | 1.30 | 1.18 | 1.10 | 1.10 | --- | 1.44 | --- | --- | --- | 0.880 | 0.850 | 0.844 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MAXIMUM DAILY, 13.3A ON MAY 23
MINIMUM DAILY, 0.128 ON JUL 10

### SUMMARY FOR THE YEAR 1969

TYPE OF GAUGE - RECORDING
LOCATION - LAT 55 39 20 N
LONG 98 11 10 W
DRAINAGE AREA, 883 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 3 690 | JUL | --- |
| FEB | 2 980 | AUG | --- |
| MAR | 3 080 | SEP | --- |
| APR | 4 220 | OCT | 2 080 |
| MAY | --- | NOV | 1 710 |
| JUN | 13 400 | DEC | 1 740 |

## TEAKO CREEK NEAR DEAD CREEK NORTH OF PINAWA - STATION NO. 05PP007

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1969

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | 0.003 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2 | 0 | 0 | 0 | 0 | 0.003 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 3 | 0 | 0 | 0 | 0 | 0.003 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 4 | 0 | 0 | 0 | 0 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 5 | 0 | 0 | 0 | 0 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 6 | 0 | 0 | 0 | 0 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 7 | 0 | 0 | 0 | 0 | 0.002 | 0.021 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 8 | 0 | 0 | 0 | 0 | 0.002 | 0.013 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 9 | 0 | 0 | 0 | 0 | 0.003 | 0.006 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 10 | 0 | 0 | 0 | 0.002E | 0.002 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 11 | 0 | 0 | 0 | 0.011A | 0.001 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 12 | 0 | 0 | 0 | 0.010E | 0.001 | 0.023 | 0.001 | 0 | 0 | 0 | 0 | 0 | 12 |
| 13 | 0 | 0 | 0 | 0.008A | 0.001 | 0.045 | 0.004 | 0 | 0 | 0 | 0 | 0 | 13 |
| 14 | 0 | 0 | 0 | 0.083A | 0.001 | 0.013 | 0.001 | 0 | 0 | 0 | 0 | 0 | 14 |
| 15 | 0 | 0 | 0 | 0.033A | 0.001 | 0.008 | 0.001 | 0 | 0 | 0 | 0 | 0 | 15 |
| 16 | 0 | 0 | 0 | 0.048E | 0.001 | 0.003 | 0.001 | 0 | 0 | 0 | 0 | 0 | 16 |
| 17 | 0 | 0 | 0 | 0.018A | 0.001 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 18 | 0 | 0 | 0 | 0.014E | 0.001 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 19 | 0 | 0 | 0 | 0.018A | 0.002 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 20 | 0 | 0 | 0 | 0.010E | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| 21 | 0 | 0 | 0 | 0.033 | 0.002 | 0.004 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| 22 | 0 | 0 | 0 | 0.048 | 0.002 | 0.004 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| 23 | 0 | 0 | 0 | 0.042 | 0.002 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| 24 | 0 | 0 | 0 | 0.028 | 0.002 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 25 | 0 | 0 | 0 | 0.032 | 0.038 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 25 |
| 26 | 0 | 0 | 0 | 0.021 | 0.034 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| 27 | 0 | 0 | 0 | 0.010 | 0.014 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 27 |
| 28 | 0 | 0 | 0 | 0.007 | 0.008 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| 29 | 0 | | 0 | 0.008 | 0.008 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| 30 | 0 | | 0 | 0.006 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 |
| 31 | 0 | | 0 | | 0.002 | | 0 | 0 | | 0 | | 0 | 31 |
| TOTAL | 0 | 0 | 0 | 0.478 | 0.148 | 0.182 | 0.008 | 0 | 0 | 0 | 0 | 0 | TOTAL |
| MEAN | 0 | 0 | 0 | 0.015 | 0.005 | 0.005 | 0 | 0 | 0 | 0 | 0 | 0 | MEAN |
| MAX | 0 | 0 | 0 | 0.083 | 0.038 | 0.045 | 0.004 | 0 | 0 | 0 | 0 | 0 | MAX |
| MIN | 0 | 0 | 0 | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.002
MAXIMUM DAILY, 0.083A ON APR 14
MINIMUM DAILY, 0 ON JAN 1

DATA CONTRIBUTED BY -
ATOMIC ENERGY OF CANADA

### SUMMARY FOR THE YEAR 1969

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 14 40 N
LONG 95 53 54 W
DRAINAGE AREA, 0.52 km²
A - MANUAL GAUGE

E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 0 | JUL | 0.08 |
| FEB | 0 | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 41.1 | OCT | 0 |
| MAY | 12.8 | NOV | 0 |
| JUN | 14.0 | DEC | 0 |

TOTAL DISCHARGE, 68.7 dam³

## TOBACCO CREEK NEAR ROSEBANK - STATION NO. 05DF018

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.0 | 0 E | 0.038 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0.0 | 0 E | 0.028 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0.0 | 0 E | 0.018 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0.0 | 0 E | 0.018 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0.0 | 0 E | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0.0 | 0 E | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0.0 | 0 E | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0.0 | 0 E | 0.008 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0.0 | 0 E | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0.0 | 0 E | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0.0 | 0 E | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0.0 | 0 E | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0.0 | 0.0108 | 0.001 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0.0 | 0.3738 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0.0 | 0.4028 | 0.002 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0.0 | 0.3618 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0.0 | 0.4848 | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0.0 | 0.6238 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0.0 | 0.3878 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0.0 | 0.3618 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0.0 | 0.3618 | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0.0 | 0.301 | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0.0 | 0.388 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0.0 | 0.350 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0.0 | 0.293 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0.0 | 0.181 | 0.003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0.0 | 0.147 | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0.0 | 0.088 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0.0 | 0.057 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0.0 | 0.048 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0.0 | | 0 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 5.471 | 0.181 | 0.065 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.182 | 0.005 | 0 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.804 | 0.038 | 0.003 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.023
MAXIMUM DAILY, 0.6949 ON APR 17
MINIMUM DAILY, 0E ON MAR 1
MAXIMUM INSTANTANEOUS,
1.168 AT 23:30 CST ON APR 17

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 27 00 N
LONG 98 09 45 W
DRAINAGE AREA, 105 km²

E - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 473 | OCT | 0 |
| MAY | 13.9 | NOV | --- |
| JUN | 0.43 | DEC | --- |

TOTAL DISCHARGE, 487 dam³

## TOUROND CREEK NEAR TOUROND - STATION NO. 05DE009

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.0 | 0 E | 0.059 | 0.001 | 0.004 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0.0 | 0 E | 0.047 | 0.001 | 0.019 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0.0 | 0 E | 0.038 | 0 | 0.038 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0.0 | 0 E | 0.033 | 0 | 0.015 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0.0 | 0 E | 0.028 | 0 | 0.008 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0.0 | 0.0018 | 0.024 | 0 | 0.005 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0.0 | 0.0018 | 0.020 | 0.001 | 0.005 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0.0 | 0.0038 | 0.019 | 0 | 0.004 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0.0 | 0.0038 | 0.017 | 0 | 0.003 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0.0 | 0.0038 | 0.015 | 0 | 0.003 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0.0 | 0.0038 | 0.012 | 0 | 0.003 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0.0 | 0.0038 | 0.010 | 0.001 | 0.005 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0.0 | 0.0068 | 0.008 | 0.003 | 0.006 | 0.018 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0.0 | 0.0068 | 0.008 | 0.002 | 0.005 | 0.018 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0.0 | 0.2428 | 0.008 | 0.002 | 0.004 | 0.010 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0.0 | 1.04 E | 0.004 | 0.002 | 0.003 | 0.008 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0.0 | 1.38 E | 0.004 | 0.003 | 0.002 | 0.004 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0.0 | 1.67 E | 0.003 | 0.003 | 0.001 | 0.004 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0.0 | 1.79 E | 0.003 | 0.003 | 0.001 | 0.003 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0.0 | 0.8478 | 0.003 | 0.003 | 0 | 0.003 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0.0 | 1.09 E | 0.003 | 0.001 | 0 | 0.002 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0.0 | 1.06 E | 0.003 | 0 | 0 | 0.002 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0.0 | 0.727E | 0.003 | 0 | 0 | 0.002 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0.0 | 0.434 | 0.002 | 0.002 | 0 | 0.001 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0.0 | 0.318 | 0.001 | 0.004 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0.0 | 0.271 | 0.001 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0.0 | 0.176 | 0.001 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0.0 | 0.133 | 0.003 | 0.002 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0.0 | 0.094 | 0.002 | 0.013 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0.0 | 0.072 | 0.002 | 0.008 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0.0 | | 0.002 | | 0 | 0 | | 0E | | --- | 31 |
| TOTAL | --- | --- | 0 | 11.697 | 0.351 | 0.087 | 0.138 | 0.070 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.389 | 0.013 | 0.003 | 0.004 | 0.003 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 1.87 | 0.059 | 0.013 | 0.038 | 0.018 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.050
MAXIMUM DAILY, 1.870 ON APR 19
MINIMUM DAILY, 0E ON MAR 1
MAXIMUM INSTANTANEOUS,
2.58 AT 03:30 CST ON APR 19

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 31 50 N
LONG 98 59 50 W
DRAINAGE AREA, 219 km²

E - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 11.9 |
| FEB | --- | AUG | 8.08 |
| MAR | 0 | SEP | 0 |
| APR | 1 000 | OCT | 0 |
| MAY | 32.9 | NOV | --- |
| JUN | 4.82 | DEC | --- |

TOTAL DISCHARGE, 1 060 dam³

## TURTLE RIVER NEAR LAURIER - STATION NO. 05LJ007

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.0088 | 0.1208 | 0.831 | 0.584 | 0.378 | 0.036 | 0.308 | 0.077 | --- | --- | 1 |
| 2 | --- | --- | 0.0108 | 0.4528 | 0.587 | 0.852 | 0.281 | 0.041 | 0.188 | 0.078 | --- | --- | 2 |
| 3 | --- | --- | 0.0108 | 1.61 B | 0.534 | 0.478 | 0.218 | 0.088 | 0.155 | 0.097 | --- | --- | 3 |
| 4 | --- | --- | 0.0178 | 2.11 B | 0.512 | 0.405 | 0.172 | 0.097 | 0.178 | 0.074 | --- | --- | 4 |
| 5 | --- | --- | 0.0128 | 2.17 B | 0.518 | 0.407 | 0.180 | 0.084 | 0.173 | 0.122 | --- | --- | 5 |
| 6 | --- | --- | 0.0088 | 1.48 B | 0.532 | 0.384 | 0.138 | 0.074 | 0.188 | 0.128 | --- | --- | 6 |
| 7 | --- | --- | 0.0088 | 1.86 B | 0.485 | 0.713 | 0.115 | 0.084 | 0.418 | 0.121 | --- | --- | 7 |
| 8 | --- | --- | 0.0068 | 1.84 B | 0.473 | 1.06 | 0.688 | 0.041 | 0.488 | 0.113 | --- | --- | 8 |
| 9 | --- | --- | 0.0018 | 1.83 B | 0.455 | 0.896 | 1.30 | 0.035 | 0.385 | 0.103 | --- | --- | 9 |
| 10 | --- | --- | 0 B | 1.44 B | 0.418 | 0.729 | 0.936 | 0.023 | 0.277 | 0.107 | --- | --- | 10 |
| 11 | --- | --- | 0 B | 1.86 B | 0.400 | 0.895 | 0.742 | 0.018 | 0.218 | 0.105 | --- | --- | 11 |
| 12 | --- | --- | 0 B | 1.83 B | 0.383 | 2.37 | 0.831 | 0.018 | 0.181 | 0.088 | --- | --- | 12 |
| 13 | --- | --- | 0 B | 2.52 B | 0.387 | 32.3 | 1.06 | 0.033 | 0.178 | 0.080 | --- | --- | 13 |
| 14 | --- | --- | 0 B | 2.75 B | 0.382 | 17.4 | 0.831 | 0.370 | 0.148 | 0.083 | --- | --- | 14 |
| 15 | --- | --- | 0.0028 | 2.88 B | 0.311 | 5.07 | 0.700 | 0.188 | 0.118 | 0.108 | --- | --- | 15 |
| 16 | --- | --- | 0.0068 | 2.11 B | 0.342 | 4.87 | 0.563 | 0.133 | 0.078 | 0.188 | --- | --- | 16 |
| 17 | --- | --- | 0.0178 | 2.88 B | 0.388 | 3.11 | 0.427 | 0.088 | 0.082 | 0.178 | --- | --- | 17 |
| 18 | --- | --- | 0.0218 | 1.81 B | 0.388 | 2.85 | 0.315 | 0.088 | 0.088 | 0.178 | --- | --- | 18 |
| 19 | --- | --- | 0.0268 | 2.24 B | 0.388 | 1.98 | 0.224 | 0.088 | 0.088 | 0.151 | --- | --- | 19 |
| 20 | --- | --- | 0.0278 | 2.81 B | 0.402 | 1.42 | 0.174 | 0.088 | 0.078 | 0.138 | --- | --- | 20 |
| 21 | --- | --- | 0.0288 | 3.36 B | 0.384 | 1.14 | 0.132 | 0.091 | 0.078 | 0.144 | --- | --- | 21 |
| 22 | --- | --- | 0.0268 | 3.88 B | 0.317 | 0.842 | 0.083 | 0.118 | 0.080 | 0.142 | --- | --- | 22 |
| 23 | --- | --- | 0.0218 | 4.65 | 0.278 | 0.612 | 0.088 | 0.100 | 0.080 | 0.184 | --- | --- | 23 |
| 24 | --- | --- | 0.0228 | 3.44 | 0.262 | 0.881 | 0.088 | 0.082 | 0.083 | 0.171 | --- | --- | 24 |
| 25 | --- | --- | 0.0288 | 2.28 | 0.404 | 0.908 | 0.052 | 0.088 | 0.088 | 0.158 | --- | --- | 25 |
| 26 | --- | --- | 0.0608 | 1.58 | 1.42 | 0.857 | 0.050 | 0.093 | 0.083 | 0.184 | --- | --- | 26 |
| 27 | --- | --- | 0.0588 | 1.20 | 1.57 | 0.814 | 0.033 | 0.088 | 0.082 | 0.261 | --- | --- | 27 |
| 28 | --- | --- | 0.0388 | 0.888 | 1.20 | 0.804 | 0.027 | 0.091 | 0.078 | 0.428 | --- | --- | 28 |
| 29 | --- | | 0.0548 | 0.870 | 0.960 | 0.832 | 0.027 | 0.482 | 0.074 | 0.456 | --- | --- | 29 |
| 30 | --- | | 0.1388 | 0.714 | 0.778 | 0.681 | 0.028 | 0.704 | 0.074 | 0.347 | --- | --- | 30 |
| 31 | --- | | 0.0528 | | 0.688 | | 0.031 | 0.508 | | 0.330 | --- | --- | 31 |
| TOTAL | --- | --- | 0.714 | 80.121 | 17.085 | 88.025 | 11.018 | 4.083 | 4.718 | 5.121 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.023 | 2.00 | 0.550 | 2.93 | 0.355 | 0.131 | 0.157 | 0.165 | --- | --- | MEAN |
| MAX | --- | --- | 0.139 | 4.65 | 1.57 | 32.3 | 1.30 | 0.704 | 0.485 | 0.454 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.120 | 0.262 | 0.384 | 0.027 | 0.018 | 0.082 | 0.074 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.778
MAXIMUM DAILY, 32.3 ON JUN 13
MINIMUM DAILY, 0B ON MAR 10
MAXIMUM INSTANTANEOUS,
37.8 AT 14:21 CST ON JUN 13

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 58 40 N
LONG 99 31 15 W
DRAINAGE AREA, 938 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 952 |
| FEB | --- | AUG | 350 |
| MAR | 81.7 | SEP | 408 |
| APR | 5 180 | OCT | 442 |
| MAY | 1 470 | NOV | --- |
| JUN | 7 610 | DEC | --- |

TOTAL DISCHARGE, 16 800 dam³

## TURTLEHEAD CREEK ABOVE DELORAINE RESERVOIR - STATION NO. 05MG016

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0 B | 1.02 B | 0.001 | 0.001 | 0.033 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0 B | 0.8518 | 0.001 | 0 | 0.007 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0 B | 1.08 | 0.001 | 0 | 0.002 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0 B | 0.478 | 0.001 | 0 | 0.001 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0 B | 0.258 | 0.001 | 0 | 0.001 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0 B | 0.184 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0 B | 0.078 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0 B | 0.021 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0.0108 | 0.013 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0.0338 | 0.007 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0.0178 | 0.008 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0.0078 | 0.010 | 0 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0.0088 | 0.028 | 0 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0.0068 | 0.045 | 0 | 0.001 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0.0118 | 0.044 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0.0278 | 0.034 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0.0118 | 0.017 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0.0088 | 0.008 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0.0038 | 0.008 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0.0018 | 0.008 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0.0028 | 0.008 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0.0018 | 0.008 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0.0028 | 0.008 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0.0038 | 0.021 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0.0348 | 0.034 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0.0918 | 0.013 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0.0278 | 0.007 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0.0208 | 0.004 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0.0028 | 0.002 | 0.001 | 0.028 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0.0038 | 0.002 | 0.001 | 0.087 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 0.0248 | | 0.001 | | 0 | 0 | | 0 | --- | --- | 31 |
| TOTAL | --- | --- | 0.338 | 4.264 | 0.028 | 0.120 | 0.034 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.011 | 0.143 | 0.001 | 0.004 | 0.001 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0.091 | 1.08 | 0.001 | 0.087 | 0.033 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.020
MAXIMUM DAILY, 1.08 ON APR 3
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
3.670 AT 10:40 CST ON APR 1

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 07 59 N
LONG 100 23 57 W
DRAINAGE AREA, 74.8 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 2.84 |
| FEB | --- | AUG | 0 |
| MAR | 39.3 | SEP | 0 |
| APR | 388 | OCT | 0 |
| MAY | 2.62 | NOV | --- |
| JUN | 10.4 | DEC | --- |

TOTAL DISCHARGE, 443 dam³

## VALLEY RIVER ABOVE GILBERT PLAINS DAM - STATION NO. 05LJ013

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | 381.133E | 380.808 | 380.788E | 380.783E | 380.776 | 380.786 | 380.788E | 381.318E | --- | 1 |
| 2 | --- | --- | --- | 381.028E | 380.803E | 380.786 | 380.788E | 380.786 | 380.788E | 380.786 | 381.088 | --- | 2 |
| 3 | --- | --- | --- | 380.926E | 380.801E | 380.781E | 380.808 | 380.786 | 380.786E | 380.786E | 381.068E | --- | 3 |
| 4 | --- | --- | --- | 380.830 | 380.788E | 380.788E | 380.786 | 380.781E | 380.786 | 380.786 | 381.068E | --- | 4 |
| 5 | --- | --- | --- | --- | 380.786 | 380.781 | 380.786 | 380.786 | 380.793E | 380.848E | 381.068E | --- | 5 |
| 6 | --- | --- | --- | --- | 380.783E | 380.784E | 380.786 | 380.788E | 380.781E | 380.813E | 381.088 | --- | 6 |
| 7 | --- | --- | --- | --- | 380.788E | 380.786 | 380.788E | 380.786 | 380.788E | 380.870E | 381.081E | --- | 7 |
| 8 | --- | --- | --- | --- | 380.786 | 380.788E | 380.786 | 380.728 | 380.786 | 381.038E | 381.038E | --- | 8 |
| 9 | --- | --- | --- | --- | 380.784E | 380.786 | 380.788E | 380.718 | 380.784E | 381.103E | 381.021E | --- | 9 |
| 10 | --- | --- | --- | --- | 380.781E | --- | 380.786 | 380.886 | 380.781 | 381.186 | 381.008 | --- | 10 |
| 11 | --- | --- | --- | --- | 380.778E | --- | 380.788E | 380.871E | 380.778 | 381.178E | 381.008E | 380.886 | 11 |
| 12 | --- | --- | --- | --- | 380.778 | --- | 380.788E | 380.848 | 380.788E | 381.186 | 381.013E | --- | 12 |
| 13 | --- | --- | --- | --- | 380.778E | --- | 380.788E | 380.808E | 380.788E | 381.186E | 381.018 | --- | 13 |
| 14 | --- | --- | 381.688 | --- | 380.778E | --- | 380.786 | 380.886 | 380.806E | 381.186E | 381.013E | --- | 14 |
| 15 | --- | --- | --- | --- | 380.778 | --- | 380.788E | 380.848E | 380.816 | 381.186E | 381.011E | --- | 15 |
| 16 | --- | --- | --- | --- | 380.781E | --- | 380.813E | 380.826 | 380.813E | 381.186 | 381.008E | --- | 16 |
| 17 | --- | --- | --- | --- | 380.786 | --- | 380.826 | 380.808E | 380.808E | 381.186E | 381.006 | --- | 17 |
| 18 | --- | --- | --- | --- | 380.786 | --- | 380.818E | 380.891 | 380.806 | 381.186 | 381.017E | --- | 18 |
| 19 | --- | --- | --- | --- | 380.813E | --- | 380.813E | 380.886E | 380.811E | 381.186E | 381.027E | --- | 19 |
| 20 | --- | --- | --- | --- | 380.808E | --- | 380.806 | 380.781 | 380.816 | 381.186 | 381.038E | --- | 20 |
| 21 | --- | --- | --- | --- | 380.848 | --- | 380.801E | 380.786 | 380.811 | 381.193E | 381.048 | --- | 21 |
| 22 | --- | --- | --- | --- | 380.838E | --- | 380.788E | 380.788E | 380.806 | 381.198E | --- | --- | 22 |
| 23 | --- | --- | --- | 380.833 | 380.828E | --- | 380.781E | 380.781 | 380.808E | 381.308 | --- | --- | 23 |
| 24 | 381.234 | --- | --- | 380.831 | 380.816 | --- | 380.786 | 380.804E | 380.784E | 381.303E | --- | --- | 24 |
| 25 | --- | --- | --- | 380.833E | 380.810E | --- | 380.784E | 380.816 | 380.786 | 381.201 | --- | --- | 25 |
| 26 | --- | --- | --- | 380.834E | 380.804E | 380.786 | 380.781E | 380.811E | 380.783E | 381.186 | --- | --- | 26 |
| 27 | --- | --- | --- | 380.836 | 380.788E | 380.786E | 380.778E | 380.808E | 380.778 | 381.323E | --- | --- | 27 |
| 28 | --- | --- | --- | 380.828E | 380.783E | 380.776 | 380.776 | 380.801E | 380.762E | 381.368E | --- | --- | 28 |
| 29 | --- | | 381.418 | 380.823E | 380.786 | 380.781E | 380.778E | 380.786 | 380.786 | 381.394E | --- | --- | 29 |
| 30 | --- | | 381.318E | 380.818 | 380.781E | 380.786 | 380.778E | 380.788E | 380.788E | 381.320E | --- | --- | 30 |
| 31 | --- | | 381.221E | | 380.786 | | 380.778E | 380.786 | | 381.388 | | --- | 31 |
| MEAN | --- | --- | --- | --- | 380.788 | --- | 380.783 | 380.737 | 380.798 | 381.118 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 380.848 | --- | 380.828 | 380.816 | 380.816 | 381.388 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 380.778 | --- | 380.778 | 380.691 | 380.778 | 380.788 | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - MANUAL
LOCATION - LAT 51 09 10 N
LONG 100 29 33 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1980

DRAINAGE AREA,
2 080 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## VALLEY RIVER NEAR DAUPHIN - STATION NO. 05LJ010

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.321B | 0.868B | 0.728 | 1.11 | 0.887 | 0.078 | 0.125 | 0.282 | --- | --- | 1 |
| 2 | --- | --- | 0.180B | 1.20 B | 0.848 | 1.10 | 0.833 | 0.081 | 0.150 | 0.246 | --- | --- | 2 |
| 3 | --- | --- | 0.183B | 1.31 B | 0.880 | 1.08 | 0.478 | 0.081 | 0.208 | 0.258 | --- | --- | 3 |
| 4 | --- | --- | 0.184B | 1.38 B | 0.838 | 1.11 | 0.470 | 0.080 | 0.238 | 0.264 | --- | --- | 4 |
| 5 | --- | --- | 0.168B | 1.34 B | 0.488 | 1.18 | 0.483 | 0.144 | 0.238 | 0.287 | --- | --- | 5 |
| 6 | --- | --- | 0.167B | 1.75 B | 0.410 | 1.30 | 0.471 | 0.028 | 0.239 | 0.248 | --- | --- | 6 |
| 7 | --- | --- | 0.172B | 2.03 B | 0.348 | 1.47 | 0.482 | 0.007 | 0.243 | 0.228 | --- | --- | 7 |
| 8 | --- | --- | 0.168B | 2.13 B | 0.288 | 1.38 | 0.881 | 0.027 | 0.241 | 0.231 | --- | --- | 8 |
| 9 | --- | --- | 0.189B | 1.53 B | 0.270 | 1.34 | 0.830 | 0.002 | 0.244 | 0.239 | --- | --- | 9 |
| 10 | --- | --- | 0.313B | 2.04 B | 0.319 | 1.38 | 0.777 | 0.002 | 0.232A | 0.218 | --- | --- | 10 |
| 11 | --- | --- | 0.328B | 2.48 B | 0.371 | 1.41 | 0.818 | 0.008 | 0.232E | 0.267 | --- | --- | 11 |
| 12 | --- | --- | 0.210B | 2.43 B | 0.448 | 1.60 | 1.38 | 0.070 | 0.228E | 0.214 | --- | --- | 12 |
| 13 | --- | --- | 0.184B | 2.38 B | 0.408 | 2.33 | 1.17 | 0.348 | 0.228E | 0.228 | --- | --- | 13 |
| 14 | --- | --- | 0.178B | 2.15 B | 0.385 | 3.24 | 1.51 | 0.103 | 0.224E | 0.239 | --- | --- | 14 |
| 15 | --- | --- | 0.159B | 1.60 B | 0.338 | 3.86 | 1.12 | 0.104 | 0.221E | 0.264 | --- | --- | 15 |
| 16 | --- | --- | 0.178B | 1.83 B | 0.370 | 3.31 | 1.33 | 0.100 | 0.248E | 0.283 | --- | --- | 16 |
| 17 | --- | --- | 0.187B | 1.84 B | 0.388 | 3.11 | 1.30 | 0.086 | 0.320E | 0.358 | --- | --- | 17 |
| 18 | --- | --- | 0.213B | 2.31 B | 0.418 | 2.68 | 1.06 | 0.038 | 0.324E | 0.413 | --- | --- | 18 |
| 19 | --- | --- | 0.232B | 2.38 B | 0.457 | 2.10 | 0.880 | 0.038 | 0.320E | 0.458 | --- | --- | 19 |
| 20 | --- | --- | 0.248B | 2.83 B | 0.482 | 1.78 | 0.731 | 0.033 | 0.320E | 0.457 | --- | --- | 20 |
| 21 | --- | --- | 0.234B | 2.17 | 0.504 | 1.38 | 0.882 | 0.037 | 0.315E | 0.448 | --- | --- | 21 |
| 22 | --- | --- | 0.221B | 1.89 | 0.550 | 1.18 | 0.481 | 0.051 | 0.315E | 0.488 | --- | --- | 22 |
| 23 | --- | --- | 0.206B | 1.78 | 0.643 | 0.986 | 0.328 | 0.084 | 0.308E | 0.457 | --- | --- | 23 |
| 24 | --- | --- | 0.278B | 1.84 | 0.769 | 0.883 | 0.288 | 0.052 | 0.302E | 0.486 | --- | --- | 24 |
| 25 | --- | --- | 0.380B | 1.34 | 0.818 | 0.787 | 0.249 | 0.037 | 0.293E | 0.483 | --- | --- | 25 |
| 26 | --- | --- | 0.830B | 1.17 | 0.838 | 0.761 | 0.218 | 0.041 | 0.284A | 0.511 | --- | --- | 26 |
| 27 | --- | --- | 0.603B | 1.02 | 0.847 | 0.702 | 0.202 | 0.026 | 0.267 | 0.728 | --- | --- | 27 |
| 28 | --- | --- | 0.780B | 1.06 | 0.873 | 0.682 | 0.178 | 0.019 | 0.266 | 0.844 | --- | --- | 28 |
| 29 | --- | | 0.850B | 0.873 | 1.02 | 0.838 | 0.148 | 0.026 | 0.247 | 0.886 | --- | --- | 29 |
| 30 | --- | | 0.481B | 0.883 | 1.13 | 0.883 | 0.133 | 0.062 | 0.243 | 0.884 | --- | --- | 30 |
| 31 | --- | | 0.610B | | 1.13 | | 0.103 | 0.114 | | 0.840 | | --- | 31 |
| TOTAL | --- | --- | 8.037 | 51.183 | 19.147 | 49.013 | 19.598 | 1.788 | 7.840 | 12.711 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.288 | 1.71 | 0.588 | 1.63 | 0.831 | 0.058 | 0.295 | 0.410 | --- | --- | MEAN |
| MAX | --- | --- | 0.780 | 2.83 | 1.13 | 3.86 | 1.38 | 0.248 | 0.324 | 0.884 | --- | --- | MAX |
| MIN | --- | --- | 0.148 | 0.883 | 0.370 | 0.883 | 0.103 | 0.002 | 0.128 | 0.218 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.877
MAXIMUM DAILY, 3.86 ON JUN 15
MINIMUM DAILY, 0.002 ON AUG 9
MAXIMUM INSTANTANEOUS,
3.94 AT 07:37 CST ON JUN 15

### SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 10 45 N
LONG 100 00 39 W
DRAINAGE AREA, 2 880 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
REGULATED

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL 1 | 690 |
| FEB | --- | AUG | 154 |
| MAR | 784 | SEP | 680 |
| APR | 4 430 | OCT 1 | 100 |
| MAY | 1 670 | NOV | --- |
| JUN | 3 680 | DEC | --- |

TOTAL DISCHARGE, 14 300 dam³

## VALLEY RIVER NEAR GRANDVIEW - STATION NO. 05LJ021

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.3508 | 0.1038 | 0.183 | 0.1388A | 0.1008 | 0.331 | 0.243 | 0.278 | --- | --- | 1 |
| 2 | --- | --- | 0.3818 | 0.0848 | 0.181 | 0.1468E | 0.1038E | 0.282 | 0.268 | 0.187 | --- | --- | 2 |
| 3 | --- | --- | 0.4268 | 0.0848 | 0.181 | 0.1858E | 0.1088E | 0.288 | 0.240 | 0.187 | --- | --- | 3 |
| 4 | --- | --- | 0.4328 | 1.33 B | 0.180 | 0.1428E | 0.1188E | 0.288 | 0.228 | 0.184 | --- | --- | 4 |
| 5 | --- | --- | 0.4248 | 1.62 B | 0.126 | 0.1388E | 0.1428E | 0.288 | 0.198 | 0.382 | --- | --- | 5 |
| 6 | --- | --- | 0.3888 | 1.12 B | 0.128 | 0.1188E | 0.1788E | 0.188 | 0.218 | 0.388 | --- | --- | 6 |
| 7 | --- | --- | 0.2888 | 1.10 B | 0.182 | 0.1288E | 0.2208E | 0.173 | 0.208 | 0.457 | --- | --- | 7 |
| 8 | --- | --- | 0.1888 | 0.8868 | 0.181 | 0.1548E | 0.2738E | 0.263 | 0.274 | 0.512 | --- | --- | 8 |
| 9 | --- | --- | 0.1218 | 1.22 B | 0.188 | 0.2088E | 0.4078E | 0.307 | 0.284 | 0.524 | --- | --- | 9 |
| 10 | --- | --- | 0.1088 | 1.24 B | 0.184 | 0.2438E | 0.3818E | 0.284 | 0.258 | 0.527 | --- | --- | 10 |
| 11 | --- | --- | 0.0918 | 1.17 B | 0.153 | 0.2788E | 0.5118E | 0.305 | 0.270 | 0.508 | --- | --- | 11 |
| 12 | --- | --- | 0.0838 | 1.02 B | 0.142 | 0.2908E | 0.5778E | 0.279 | 0.288 | 0.373 | --- | --- | 12 |
| 13 | --- | --- | 0.0888 | 1.11 B | 0.085 | 0.4048E | 0.6478A | 0.191 | 0.519 | 0.301 | --- | --- | 13 |
| 14 | --- | --- | 0.0548 | 1.32 B | 0.152 | 1.35 E | 0.751 | 0.240 | 0.458 | 0.348 | --- | --- | 14 |
| 15 | --- | --- | 0.0988 | 1.73 B | 0.178 | 1.77 E | 0.758 | 0.312 | 0.474 | 0.372 | --- | --- | 15 |
| 16 | --- | --- | 0.0888 | 1.81 B | 0.076 | 1.85 E | 0.883 | 0.288 | 0.447 | 0.388 | --- | --- | 16 |
| 17 | --- | --- | 0.0888 | 1.08 B | 0.088 | 1.35 E | 0.777 | 0.258 | 0.314 | 0.281 | --- | --- | 17 |
| 18 | --- | --- | 0.0858 | 1.03 B | 0.147 | 1.13 E | 0.724 | 0.281 | 0.882 | 0.328 | --- | --- | 18 |
| 19 | --- | --- | 0.0718 | 0.7038 | 0.157 | 0.8578E | 0.837 | 0.301 | 0.814 | 0.435 | --- | --- | 19 |
| 20 | --- | --- | 0.0518 | 0.7038 | 0.114 | 0.8988E | 1.38 | 0.347 | 0.488 | 0.578 | --- | --- | 20 |
| 21 | --- | --- | 0.0408 | 0.5138 | 0.080 | 0.8428E | 0.823 | 0.344 | 0.310 | 0.513 | --- | --- | 21 |
| 22 | --- | --- | 0.0288 | 0.4388 | 0.085 | 0.4078E | 0.814 | 0.403 | 0.188 | 0.838 | --- | --- | 22 |
| 23 | --- | --- | 0.0258 | 0.3888 | 0.157 | 0.2788E | 0.831 | 0.382 | 0.183 | 0.533 | --- | --- | 23 |
| 24 | --- | --- | 0.0178 | 0.5028 | 0.058 | 0.3208E | 0.868 | 0.228 | 0.383 | 0.484 | --- | --- | 24 |
| 25 | --- | --- | 0.0318 | 0.8388 | 0.038 | 0.1838E | 0.888 | 0.274 | 0.317 | 0.448 | --- | --- | 25 |
| 26 | --- | --- | 0.0708 | 0.388 | 0.048 | 0.1548E | 0.808 | 0.278 | 0.288 | 0.384 | --- | --- | 26 |
| 27 | --- | --- | 0.0548 | 0.305 | 0.138 | 0.1398E | 0.482 | 0.350 | 0.443 | 0.838 | --- | --- | 27 |
| 28 | --- | --- | 0.0478 | 0.285 | 0.187 | 0.1128E | 0.807 | 0.385 | 0.472 | 1.02 B | --- | --- | 28 |
| 29 | --- | --- | 0.0488 | 0.245 | 0.108 | 0.1008E | 0.494 | 0.257 | 0.330 | 1.31 B | --- | --- | 29 |
| 30 | --- | --- | 0.0488 | 0.183 | 0.084 | 0.0948E | 0.383 | 0.198 | 0.278 | 1.06 B | --- | --- | 30 |
| 31 | --- | --- | 0.0548 | | 0.089 | | 0.487 | 0.222 | | 0.8288 | | --- | 31 |
| TOTAL | --- | --- | 4.428 | 25.178 | 3.931 | 13.888 | 16.412 | 8.678 | 10.432 | 15.232 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.143 | 0.839 | 0.127 | 0.462 | 0.529 | 0.280 | 0.348 | 0.491 | --- | --- | MEAN |
| MAX | --- | --- | 0.432 | 1.81 | 0.188 | 1.77 | 1.28 | 0.403 | 0.814 | 1.31 | --- | --- | MAX |
| MIN | --- | --- | 0.017 | 0.084 | 0.038 | 0.084 | 0.100 | 0.173 | 0.183 | 0.184 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.401
MAXIMUM DAILY, 1.818 ON APR 15
MINIMUM DAILY, 0.0178 ON MAR 24
MAXIMUM INSTANTANEOUS,
2.788 AT 08:45 CST ON APR 15

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 11 10 N
LONG 100 41 40 W
DRAINAGE AREA, 1 730 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 1 420 |
| FEB | --- | AUG | 750 |
| MAR | 383 | SEP | 901 |
| APR | 2 180 | OCT | 1 320 |
| MAY | 340 | NOV | --- |
| JUN | 1 200 | DEC | --- |

TOTAL DISCHARGE, 8 490 dam³

## VERMILION RESERVOIR NEAR DAUPHIN - STATION NO. 05LJ046

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 387.621 | 387.188 | 386.883 | 386.138 | 388.380 | 388.370 | 388.201 | 388.226 | 388.375 | 388.484 | 388.280A | 388.101 | 1 |
| 2 | 387.607 | 387.174 | 386.881 | 386.187 | 388.365 | 388.367 | 388.248 | 388.328 | 388.385 | 388.448 | 388.328A | 388.048 | 2 |
| 3 | 387.594 | 387.162 | 386.841 | 386.250 | 388.361 | 388.347 | 388.214 | 388.328 | 388.381 | 388.418 | 388.348A | 388.868 | 3 |
| 4 | 387.578 | 387.148 | 386.817 | 386.348 | 388.346 | 388.338 | 387.986 | 388.324 | 388.388 | 388.383A | 388.388A | 388.932 | 4 |
| 5 | 387.566 | 387.132 | 386.596 | 386.553 | 388.340 | 388.332 | 387.829 | 388.318 | 388.357 | 388.121A | 388.430A | 388.886 | 5 |
| 6 | 387.552 | 387.116 | 386.571 | 386.744 | 388.348 | 388.333 | 387.638 | 388.319 | 388.380 | 388.088A | 388.458A | 388.888 | 6 |
| 7 | 387.538 | 387.101 | 386.580 | 388.815 | 388.344 | 388.338 | 387.653A | 388.320 | 388.374 | 388.048A | 388.490A | 388.854 | 7 |
| 8 | 387.523 | 387.084 | 386.530 | 387.030 | 388.350 | 388.380 | 387.670A | 388.318 | 388.386 | 388.017A | 388.521A | 388.833 | 8 |
| 9 | 387.510 | 387.068 | 386.505 | 387.127 | 388.352 | 388.380 | 387.818 | 388.308 | 388.378 | 388.858A | 388.548A | 388.830 | 9 |
| 10 | 387.496 | 387.051 | 386.487 | 387.222 | 388.348 | 388.380 | 387.880 | 388.300 | 388.371 | 388.878A | 388.577A | 388.818 | 10 |
| 11 | 387.482 | 387.034 | 386.474 | 387.293 | 388.343 | 388.373 | 388.033A | 388.301 | 388.388 | 388.873 | 388.598A | 388.798 | 11 |
| 12 | 387.466 | 387.020 | 386.464 | 387.380 | 388.335 | 388.388 | 388.117A | 388.301 | 388.359 | 388.858A | 388.608A | 388.787 | 12 |
| 13 | 387.454 | 387.002 | 386.437 | 387.480 | 388.329A | 388.804 | 388.240A | 388.344 | 388.348 | 388.817A | 388.631 | 388.782 | 13 |
| 14 | 387.438 | 386.984 | 386.417 | 387.588 | 388.322E | 388.883 | 388.348 | 388.348 | 388.350 | 388.881A | 388.638 | 388.774 | 14 |
| 15 | 387.420 | 386.968 | 386.401 | 387.708A | 388.334E | 388.718 | 388.378 | 388.348 | 388.348 | 388.892 | 388.882 | 388.788 | 15 |
| 16 | 387.408 | 386.951 | 386.381 | 387.882 | 388.332E | 388.890 | 388.374 | 388.348 | 388.348 | 388.888 | 388.887 | 388.782 | 16 |
| 17 | 387.388 | 386.931 | 386.358 | 387.867A | 388.332A | 388.535 | 388.381 | 388.348 | 388.348 | 388.881 | 388.883 | 388.782 | 17 |
| 18 | 387.381 | 386.911 | 386.339 | 388.080E | 388.335 | 388.532 | 388.388 | 388.348 | 388.342 | 388.880 | 388.888 | 388.788 | 18 |
| 19 | 387.388 | 386.894 | 386.318 | 388.142A | 388.335 | 388.488 | 388.351 | 388.342 | 388.341 | 388.881 | 388.881 | 388.737 | 19 |
| 20 | 387.381 | 386.878 | 386.300 | 388.221 | 388.332 | 388.488 | 388.342 | 388.338 | 388.341 | 388.888 | 388.883 | 388.738 | 20 |
| 21 | 387.338 | 386.863 | 386.283 | 388.288 | 388.327 | 388.483 | 388.338 | 388.337 | 388.343 | 388.887 | 388.888 | 388.728 | 21 |
| 22 | 387.321 | 386.833 | 386.264 | 388.388 | 388.327 | 388.428 | 388.334 | 388.338 | 388.339 | 388.908 | 388.873 | 388.718 | 22 |
| 23 | 387.307 | 386.808 | 386.247 | 388.358 | 388.327 | 388.418 | 388.328 | 388.340 | 388.334 | 388.918 | 388.878 | 388.708 | 23 |
| 24 | 387.292 | 386.788 | 386.232 | 388.408 | 388.327 | 388.407 | 388.328 | 388.342 | 388.333 | 388.933 | 388.842 | 388.888 | 24 |
| 25 | 387.278 | 386.788 | 386.218 | 388.407 | 388.326 | 388.388 | 388.330 | 388.388 | 388.338 | 388.947 | 388.838 | 388.887 | 25 |
| 26 | 387.288 | 386.747 | 386.204 | 388.388 | 388.327 | 388.348A | 388.327 | 388.388 | 388.238 | 388.958A | 388.421 | 388.881 | 26 |
| 27 | 387.251 | 386.728 | 386.184 | 388.388 | 388.328 | 388.187A | 388.324 | 388.381 | 387.833 | 388.948A | 388.318 | 388.888 | 27 |
| 28 | 387.234 | 386.704 | 386.178 | 388.378 | 388.328 | 388.028A | 388.324 | 388.352 | 388.738A | 388.048A | 388.288 | 388.888 | 28 |
| 29 | 387.220 | | 386.184 | 388.388 | 388.373 | 388.078 | 388.324 | 388.387 | 388.548 | 388.127A | 388.207 | 388.881 | 29 |
| 30 | 387.208 | | 386.148 | 388.382 | 388.383 | 388.148 | 388.328 | 388.387 | 388.538 | 388.202A | 388.188 | 388.888 | 30 |
| 31 | 387.203 | | 386.138 | | 388.388 | | 388.328 | 388.388 | | 388.288 | | 388.883 | 31 |
| MEAN | 387.408 | 386.988 | 386.387 | 387.588 | 388.363 | 388.407 | 388.288 | 388.338 | 388.147 | 388.838 | 388.812 | 388.788 | MEAN |
| MAX | 387.621 | 387.188 | 386.883 | 388.407 | 388.383 | 388.883 | 388.378 | 388.387 | 388.388 | 388.484 | 388.873 | 388.101 | MAX |
| MIN | 387.203 | 386.704 | 386.138 | 386.138 | 388.326 | 388.028 | 387.829 | 388.300 | 388.538 | 388.888 | 388.188 | 388.888 | MIN |

WATER LEVELS IN METRES

MEAN, 387.344
MAXIMUM DAILY, 388.883 ON JUN 14
MINIMUM DAILY, 386.880 ON DEC 30
MAXIMUM INSTANTANEOUS,
388.981 AT 20:10 CST ON JUN 13

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 02 45 N
LONG 100 10 05 W

A - MANUAL GAUGE
E - ESTIMATED
REGULATED SINCE 1979
DRAINAGE AREA,
371 km²

## VERMILION RIVER NEAR DAUPHIN - STATION NO. 05LJ012

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0.0378 | 0.5760 | 0.470 | 0.428 | 0.183 | 0.025 | 0.888 | 0.382 | --- | --- | 1 |
| 2 | --- | --- | 0.0628 | 0.8068 | 0.431 | 0.310 | 0.142 | 0.027 | 0.485 | 0.298 | --- | --- | 2 |
| 3 | --- | --- | 0.0600 | 1.80 B | 0.386 | 0.201 | 0.120 | 0.028 | 0.410 | 0.288 | --- | --- | 3 |
| 4 | --- | --- | 0.1100 | 1.14 B | 0.382 | 0.213 | 0.810 | 0.026 | 0.348 | 0.288 | --- | --- | 4 |
| 5 | --- | --- | 0.1408 | 1.05 B | 0.342 | 0.186 | 2.07 | 0.027 | 0.300 | 1.43 | --- | --- | 5 |
| 6 | --- | --- | 0.1728 | 0.9518 | 0.333 | 0.167 | 0.884 | 0.022 | 0.258 | 1.18 | --- | --- | 6 |
| 7 | --- | --- | 0.2108 | 0.8488 | 0.290 | 0.278 | 0.294 | 0.021 | 0.237 | 0.408 | --- | --- | 7 |
| 8 | --- | --- | 0.2478 | 0.3888 | 0.278 | 0.370 | 0.171 | 0.017 | 0.337 | 0.328 | --- | --- | 8 |
| 9 | --- | --- | 0.2908 | 0.2898 | 0.263 | 1.04 | 0.234 | 0.015 | 0.884 | 0.284 | --- | --- | 9 |
| 10 | --- | --- | 0.3368 | 0.1828 | 0.238 | 0.950 | 0.116 | 0.013 | 0.634 | 0.262 | --- | --- | 10 |
| 11 | --- | --- | 0.3808 | 0.2388 | 0.228 | 0.888 | 0.093 | 0.013 | 0.488 | 0.291 | --- | --- | 11 |
| 12 | --- | --- | 0.3148 | 0.2858 | 0.243 | 1.05 | 0.082 | 0.029 | 0.408 | 0.288 | --- | --- | 12 |
| 13 | --- | --- | 0.2478 | 0.3628 | 0.218 | 10.1 | 0.060 | 0.388 | 0.331 | 0.288 | --- | --- | 13 |
| 14 | --- | --- | 0.1938 | 0.2048 | 0.188 | 23.6 | 0.051 | 0.110 | 0.257 | 0.258 | --- | --- | 14 |
| 15 | --- | --- | 0.1408 | 0.2628 | 0.161 | 14.8 | 0.088 | 0.071 | 0.204 | 0.303 | --- | --- | 15 |
| 16 | --- | --- | 0.0888 | 0.2408 | 0.188 | 8.03 | 0.388 | 0.041 | 0.148 | 0.288 | --- | --- | 16 |
| 17 | --- | --- | 0.0628 | 0.2308 | 0.151 | 6.03 | 0.416 | 0.033 | 0.140 | 0.270 | --- | --- | 17 |
| 18 | --- | --- | 0.0808 | 0.1618 | 0.188 | 4.88 | 0.340 | 0.030 | 0.117 | 0.228 | --- | --- | 18 |
| 19 | --- | --- | 0.1128 | 0.1518 | 0.188 | 4.18 | 0.268 | 0.084 | 0.088 | 0.217 | --- | --- | 19 |
| 20 | --- | --- | 0.1428 | 0.141 | 0.180 | 3.13 | 0.203 | 0.063 | 0.104 | 0.202 | --- | --- | 20 |
| 21 | --- | --- | 0.1788 | 0.143 | 0.170 | 2.34 | 0.180 | 0.058 | 0.097 | 0.188 | --- | --- | 21 |
| 22 | --- | --- | 0.2188 | 0.180 | 0.170 | 1.73 | 0.122 | 0.046 | 0.078 | 0.178 | --- | --- | 22 |
| 23 | --- | --- | 0.2568 | 0.148 | 0.188 | 1.38 | 0.100 | 0.038 | 0.081 | 0.164 | --- | --- | 23 |
| 24 | --- | --- | 0.2988 | 0.782 | 0.181 | 1.12 | 0.070 | 0.035 | 0.067 | 0.148 | --- | --- | 24 |
| 25 | --- | --- | 0.3478 | 1.05 | 0.241 | 0.885 | 0.083 | 0.038 | 0.080 | 0.131 | --- | --- | 25 |
| 26 | --- | --- | 0.3868 | 1.05 | 0.273 | 0.718 | 0.043 | 0.030 | 0.078 | 0.118 | --- | --- | 26 |
| 27 | --- | --- | 0.3508 | 0.887 | 0.588 | 1.89 | 0.038 | 0.035 | 4.84 | 0.204 | --- | --- | 27 |
| 28 | --- | --- | 0.3028 | 0.737 | 0.992 | 2.21 | 0.033 | 0.258 | 6.88 | 0.183 | --- | --- | 28 |
| 29 | --- | | 0.2578 | 0.600 | 0.842 | 0.882 | 0.031 | 0.417 | 3.70 | 0.188 | --- | --- | 29 |
| 30 | --- | | 0.2068 | 0.508 | 0.782 | 0.318 | 0.030 | 0.288 | 0.811 | 0.148 | --- | --- | 30 |
| 31 | --- | | 0.8858 | | 0.812 | | 0.027 | 0.760 | | 0.120A | | --- | 31 |
| TOTAL | --- | --- | 5.818 | 18.071 | 10.413 | 85.498 | 7.788 | 3.045 | 21.880 | 9.430 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.220 | 0.538 | 0.338 | 3.18 | 0.251 | 0.088 | 0.733 | 0.304 | --- | --- | MEAN |
| MAX | --- | --- | 0.585 | 1.80 | 0.992 | 23.6 | 2.07 | 0.760 | 6.88 | 1.43 | --- | --- | MAX |
| MIN | --- | --- | 0.037 | 0.141 | 0.161 | 0.167 | 0.027 | 0.013 | 0.078 | 0.118 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.688
MAXIMUM DAILY, 23.6 ON JUN 14
MINIMUM DAILY, 0.013 ON AUG 10
MAXIMUM INSTANTANEOUS,
26.8 AT 07:05 CST ON JUN 14

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 11 00 N
LONG 100 00 45 W
DRAINAGE AREA, 674 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

REGULATED SINCE 1970

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 671 |
| FEB | --- | AUG | 283 |
| MAR | 589 | SEP | 1 800 |
| APR | 1 380 | OCT | 815 |
| MAY | 900 | NOV | --- |
| JUN | 6 280 | DEC | --- |

TOTAL DISCHARGE, 14 800 dam³

## WANIPIGOW LAKE NEAR BISSETT (CAMPGROUND) - STATION NO. 05RA803

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | --- | 230.638E | 230.748E | 230.401E | 230.352 | --- | --- | --- | 1 |
| 2 | --- | --- | --- | --- | --- | 230.628 | 230.758E | 230.391 | --- | 230.313 | --- | --- | 2 |
| 3 | --- | --- | --- | --- | --- | --- | 230.770 | 230.381E | --- | --- | --- | --- | 3 |
| 4 | --- | --- | --- | --- | --- | --- | 230.780E | 230.381 | --- | --- | --- | --- | 4 |
| 5 | --- | --- | --- | --- | --- | --- | 230.730 | 230.388E | --- | --- | --- | --- | 5 |
| 6 | --- | --- | --- | --- | --- | --- | 230.700E | 230.384E | --- | --- | --- | --- | 6 |
| 7 | --- | --- | --- | --- | --- | --- | 230.670 | 230.381 | --- | --- | --- | --- | 7 |
| 8 | --- | --- | --- | --- | --- | --- | 230.670E | 230.378E | --- | --- | --- | --- | 8 |
| 9 | --- | --- | --- | --- | --- | --- | 230.670E | 230.371 | --- | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | --- | --- | 230.670 | 230.368E | --- | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | --- | --- | 230.661E | 230.361 | --- | --- | --- | --- | 11 |
| 12 | --- | --- | --- | --- | --- | 230.690 | 230.631 | 230.368E | --- | --- | --- | --- | 12 |
| 13 | --- | --- | --- | --- | --- | 230.635E | 230.608E | 230.355E | --- | --- | --- | --- | 13 |
| 14 | --- | --- | --- | --- | --- | 230.680 | 230.581 | 230.352 | --- | --- | --- | --- | 14 |
| 15 | --- | --- | --- | --- | --- | 230.680E | 230.578E | 230.347E | --- | --- | --- | --- | 15 |
| 16 | --- | --- | --- | --- | --- | 230.680 | 230.571E | 230.342 | --- | --- | --- | --- | 16 |
| 17 | --- | --- | --- | --- | --- | 230.677E | 230.568E | 230.347E | --- | --- | --- | --- | 17 |
| 18 | --- | --- | --- | --- | --- | 230.673E | 230.561E | 230.392 | --- | --- | --- | --- | 18 |
| 19 | --- | --- | --- | --- | --- | 230.670 | 230.558E | 230.388E | --- | --- | --- | --- | 19 |
| 20 | --- | --- | --- | --- | --- | 230.670E | 230.551E | 230.385E | --- | --- | --- | --- | 20 |
| 21 | --- | --- | --- | --- | --- | 230.670 | 230.548E | 230.372 | --- | --- | --- | --- | 21 |
| 22 | --- | --- | --- | --- | --- | 230.680E | 230.541E | 230.362E | --- | --- | --- | --- | 22 |
| 23 | --- | --- | --- | --- | --- | 230.650 | 230.538E | 230.362 | --- | --- | --- | --- | 23 |
| 24 | --- | --- | --- | --- | --- | 230.602E | 230.531 | 230.362E | --- | --- | --- | --- | 24 |
| 25 | --- | --- | --- | --- | --- | 230.674E | 230.908E | 230.362 | --- | --- | --- | --- | 25 |
| 26 | --- | --- | --- | --- | 230.878 | 230.668E | 230.481 | 230.362E | --- | --- | --- | --- | 26 |
| 27 | --- | --- | --- | --- | 230.718E | 230.688E | 230.478E | 230.362E | --- | --- | --- | --- | 27 |
| 28 | --- | --- | --- | --- | 230.762E | 230.710E | 230.471 | 230.362 | --- | --- | --- | --- | 28 |
| 29 | --- | | --- | --- | 230.788 | 230.722E | 230.461E | 230.362E | --- | --- | --- | --- | 29 |
| 30 | --- | | --- | --- | 230.818E | 230.734E | 230.431E | 230.362 | --- | --- | --- | --- | 30 |
| 31 | --- | | --- | | 230.848 | | 230.411 | 230.362E | | --- | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | --- | 230.592 | 230.384 | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | 230.770 | 230.401 | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | --- | 230.411 | 230.342 | --- | --- | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - MANUAL
LOCATION - LAT 51 05 26 N
LONG 95 59 09 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1917

DRAINAGE AREA,
1 430 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## WASKADA CREEK NEAR CRANMER - STATION NO. 05MP014

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0 B | 4.85 B | 0 | 0 | 1.05 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0 B | 5.08 | 0 | 0 | 0.285 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0 B | 2.84 | 0 | 0 | 0.021 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0 B | 1.30 | 0 | 0 | 0.001 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0 B | 0.536 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0 B | 0.301 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0 B | 0.081 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0 B | 0.023 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0 B | 0.018 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0 B | 0.006 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0 B | 0.005 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0 B | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0 B | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0 B | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0 B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0.0388 B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 1.25 B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 1.75 B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 2.04 B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 1.60 B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 1.56 B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 1.51 B | 0 | 0 | 0.075 | 0 | 0 | 0 | 0 | --- | --- | 30 |
| 31 | --- | | 2.06 B | | 0 | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 13.419 | 14.539 | 0 | 0.075 | 1.387 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.401 | 0.485 | 0 | 0.003 | 0.044 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 2.06 | 5.08 | 0 | 0.075 | 1.05 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.116
MAXIMUM DAILY, 5.08 ON APR 2
MINIMUM DAILY, 0 ON MAR 1
MAXIMUM INSTANTANEOUS,
7.868 AT 21:37 CST ON APR 1

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 07 40 N
LONG 100 43 50 W
DRAINAGE AREA, 110 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 116 |
| FEB | --- | AUG | 0 |
| MAR | 1 070 | SEP | 0 |
| APR | 1 280 | OCT | 0 |
| MAY | 0 | NOV | --- |
| JUN | 6.46 | DEC | --- |

TOTAL DISCHARGE, 2 450 dam³

## WATERMEN LAKE AT SKOWNAN - STATION NO. 05LH004

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 261.834 | 262.036 | 261.823 | 261.765 | 261.771 | 261.858 | 261.803 | 261.747 | 1 |
| 2 | --- | --- | --- | --- | 261.848 | 262.035 | 261.829 | 261.774 | 261.763 | 261.748 | 261.788 | 261.746 | 2 |
| 3 | --- | --- | --- | --- | 261.850 | 262.050 | 261.838 | 261.777 | 261.753 | 261.707 | 261.782 | 261.741 | 3 |
| 4 | --- | --- | --- | --- | 261.864 | 261.881 | 261.824 | 261.818 | 261.771 | 261.707 | 261.767 | 261.734 | 4 |
| 5 | --- | --- | --- | --- | 261.880 | 262.010 | 261.841 | 261.828 | 261.766 | 261.764 | 261.740 | 261.727 | 5 |
| 6 | --- | --- | --- | --- | 261.928 | 262.005 | 261.818 | 261.764 | 261.772 | 261.743 | 261.740 | 261.724 | 6 |
| 7 | --- | --- | --- | --- | 261.868 | 262.017 | 261.900 | 261.767 | 261.775 | 261.701 | 261.741 | 261.717 | 7 |
| 8 | --- | --- | --- | --- | 261.856 | 261.864 | 261.810 | 261.765 | 261.783 | 261.688 | 261.740 | 261.716 | 8 |
| 9 | --- | --- | --- | --- | 261.880 | 261.873 | 261.908 | 261.783 | 261.817 | 261.724 | 261.742 | 261.707 | 9 |
| 10 | 261.810A | --- | --- | --- | 261.947 | 261.871 | 261.817 | 261.768 | 261.783 | 261.701 | 261.741 | 261.705 | 10 |
| 11 | --- | --- | --- | --- | 261.848 | 262.008 | 261.826 | 261.737 | 261.807 | 261.723 | 261.739 | 261.701 | 11 |
| 12 | --- | --- | --- | --- | 261.887 | 262.118 | 261.804 | 261.776 | 261.781 | 261.713 | 261.742 | 261.887 | 12 |
| 13 | --- | --- | --- | --- | 261.864 | 261.881 | 261.868 | 261.768 | 261.772 | 261.713 | 261.761 | 261.881 | 13 |
| 14 | --- | --- | --- | --- | 262.008 | 261.858 | 261.862 | 261.736 | 261.776 | 261.720 | 261.765 | 261.865 | 14 |
| 15 | --- | --- | --- | --- | 262.012 | 261.847 | 261.872 | 261.731 | 261.781 | 261.782 | 261.781 | 261.883 | 15 |
| 16 | --- | --- | --- | --- | 261.893 | 261.831 | 261.803 | 261.721 | 261.770 | 261.724 | 261.762 | 261.877A | 16 |
| 17 | --- | --- | --- | --- | 262.008 | 261.855 | 261.807 | 261.706 | 261.786 | 261.716 | 261.787 | 261.874E | 17 |
| 18 | --- | --- | --- | 261.840A | 262.023 | 261.868 | 261.856 | 261.726 | 261.817 | 261.688 | 261.764 | 261.863E | 18 |
| 19 | --- | --- | --- | 261.858 | 262.035 | 261.846 | 261.854 | 261.806 | 261.788 | 261.674 | 261.771 | 261.850E | 19 |
| 20 | --- | 261.813A | --- | 261.868 | 262.014 | 261.863 | 261.849 | 261.736 | 261.773 | 261.724 | 261.772 | 261.854E | 20 |
| 21 | --- | --- | --- | 261.888 | 262.050 | 261.868 | 261.838 | 261.781 | 261.775 | 261.708 | 261.788 | 261.850E | 21 |
| 22 | --- | --- | --- | 261.874 | 262.048 | 261.867 | 261.801 | 261.730 | 261.807 | 261.723 | 261.785 | 261.850E | 22 |
| 23 | --- | --- | --- | 261.878 | 262.048 | 261.846 | 261.843 | 261.713 | 261.698 | 261.723 | 261.786 | 261.838E | 23 |
| 24 | --- | --- | --- | 261.886 | 262.053 | 261.841 | 261.824 | 261.700 | 261.775 | 261.713 | 261.782 | 261.838A | 24 |
| 25 | --- | --- | --- | 261.897 | 262.127 | 261.837 | 261.813 | 261.719 | 261.762 | 261.718 | 261.789 | 261.830 | 25 |
| 26 | --- | --- | --- | 261.908 | 262.041 | 261.876 | 261.838 | 261.711 | 261.706 | 261.745 | 261.780 | 261.828 | 26 |
| 27 | --- | --- | --- | 261.918 | 262.041 | 261.889 | 261.805 | 261.718 | 261.727 | 261.703 | 261.788 | 261.827 | 27 |
| 28 | --- | --- | --- | 261.927 | 262.053 | 261.932 | 261.774 | 261.788 | 261.788 | 261.788 | 261.784 | 261.823 | 28 |
| 29 | --- | | 261.700A | 261.923 | 262.018 | 261.863 | 261.788 | 261.820 | 261.726 | 261.769 | 261.781 | 261.823A | 29 |
| 30 | --- | | --- | 261.924 | 262.032 | 261.838 | 261.788 | 261.773 | 261.767 | 261.778 | 261.748 | 261.826E | 30 |
| 31 | --- | | --- | | 262.030 | | 261.782 | 261.774 | | 261.801 | | 261.831E | 31 |
| MEAN | --- | --- | --- | --- | 262.003 | 261.978 | 261.868 | 261.783 | 261.770 | 261.733 | 261.786 | 261.878 | MEAN |
| MAX | --- | --- | --- | --- | 262.127 | 262.118 | 261.941 | 261.838 | 261.817 | 261.858 | 261.803 | 261.747 | MAX |
| MIN | --- | --- | --- | --- | 261.828 | 261.831 | 261.774 | 261.700 | 261.698 | 261.688 | 261.730 | 261.823 | MIN |

### SUMMARY FOR THE YEAR 1988

WATER LEVELS IN METRES

MAXIMUM DAILY, 262.127 ON MAY 25
MINIMUM DAILY, 261.823 ON DEC 26
MAXIMUM INSTANTANEOUS,
262.220 AT 10:33 CST ON MAY 25

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM 1928 ADJUSTMENT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 56 20 N
LONG 99 35 20 W

A - MANUAL GAUGE

E - ESTIMATED

DRAINAGE AREA,
55 000 km²

## WATERHEN RIVER NEAR WATERHEN - STATION NO. 05LH005

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30.28 | 10.3 B | 6.558 | 4.248 | 61.2 | 98.4 | 72.7 | 60.5 | 58.7 | 61.3 | 57.6 | 27.3 B | 1 |
| 2 | 28.58 | 10.7 B | 6.468 | 5.058 | 68.1 | 100 | 77.8 | 57.8 | 57.2 | 58.2 | 48.2 | 28.6 B | 2 |
| 3 | 26.88 | 10.1 B | 6.018 | 5.648 | 66.7 | 108 | 81.3 | 58.0 | 54.8 | 49.0 | 58.6 | 28.6 B | 3 |
| 4 | 28.08 | 14.6 B | 5.718 | 6.048 | 68.2 | 97.8 | 78.7 | 61.6 | 59.7 | 47.8 | 58.8 | 28.3 B | 4 |
| 5 | 27.38 | 14.2 B | 5.808 | 6.418 | 64.6 | 84.4 | 81.3 | 60.7 | 58.8 | 58.0 | 58.4 | 28.2 B | 5 |
| 6 | 27.08 | 13.7 B | 5.308 | 6.828 | 78.8 | 93.8 | 80.1 | 60.3 | 58.8 | 58.8 | 58.2 | 24.7 B | 6 |
| 7 | 27.18 | 13.0 B | 5.138 | 7.288 | 88.4 | 87.7 | 73.0 | 57.1 | 60.4 | 48.4 | 52.0 | 23.8 B | 7 |
| 8 | 28.98 | 12.7 B | 4.888 | 7.588 | 88.4 | 80.0 | 76.6 | 58.4 | 63.6 | 41.6 | 51.1 | 23.6 B | 8 |
| 9 | 26.68 | 12.4 B | 4.648 | 7.618 | 86.3 | 87.3 | 74.8 | 64.8 | 68.7 | 53.7 | 56.4 | 22.7 B | 9 |
| 10 | 26.08 | 11.8 B | 5.128 | 8.388 | 78.0 | 86.7 | 78.4 | 66.1 | 63.0 | 46.8 | 58.1 | 21.8 B | 10 |
| 11 | 24.28 | 11.4 B | 6.788 | 8.888 | 71.7 | 81.1 | 74.2 | 62.4 | 65.7 | 64.2 | 58.88 | 20.4 B | 11 |
| 12 | 23.38 | 11.0 B | 6.488 | 9.488 | 78.1 | 120 | 78.2 | 64.7 | 68.2 | 60.0 | 42.28 | 19.5 B | 12 |
| 13 | 22.28 | 10.8 B | 6.148 | 11.4 B | 87.8 | 88.6 | 74.0 | 63.4 | 58.8 | 48.6 | 38.88 | 18.4 B | 13 |
| 14 | 21.68 | 10.8 B | 6.138 | 12.6 B | 83.1 | 88.1 | 72.7 | 63.8 | 58.7 | 50.8 | 50.18 | 17.2 B | 14 |
| 15 | 21.48 | 10.8 B | 5.048 | 14.7 B | 85.8 | 80.1 | 70.8 | 62.2 | 58.7 | 59.1 | 42.28 | 16.0 B | 15 |
| 16 | 21.28 | 10.5 B | 4.848 | 16.7 B | 88.1 | 71.4 | 68.2 | 60.4 | 59.4 | 61.3 | 43.88 | 15.0 B | 16 |
| 17 | 20.68 | 9.928 | 4.558 | 18.6 B | 89.4 | 81.8 | 68.6 | 48.8 | 54.7 | 52.2 | 46.38 | 14.3 B | 17 |
| 18 | 20.08 | 9.318 | 4.488 | 21.1 B | 82.8 | 86.7 | 70.7 | 60.7 | 74.2 | 40.6 | 43.88 | 13.8 B | 18 |
| 19 | 20.08 | 8.128 | 4.278 | 25.3 B | 81.8 | 78.6 | 68.3 | 67.4 | 68.8 | 32.8 | 45.09 | 12.6 B | 19 |
| 20 | 19.88 | 8.888 | 4.078 | 36.4 B | 81.1 | 80.3 | 88.2 | 67.8 | 68.8 | 61.2 | 48.19 | 11.7 B | 20 |
| 21 | 18.38 | 8.488 | 4.008 | 44.8 B | 101 | 88.1 | 84.1 | 65.3 | 62.1 | 48.2 | 42.88 | 10.7 B | 21 |
| 22 | 18.08 | 7.978 | 3.888 | 58.6 B | 101 | 87.3 | 84.3 | 60.1 | 78.4 | 50.8 | 38.68 | 9.728 | 22 |
| 23 | 16.78 | 7.478 | 3.588 | 86.8 B | 101 | 82.3 | 88.0 | 48.0 | 46.3 | 51.5 | 36.48 | 8.878 | 23 |
| 24 | 16.38 | 7.708 | 3.748 | 73.5 | 100 | 81.3 | 85.2 | 41.8 | 55.5 | 48.1 | 35.08 | 8.268 | 24 |
| 25 | 16.08 | 7.708 | 3.888 | 74.8 | 128 | 80.3 | 83.6 | 48.7 | 68.4 | 49.2 | 33.48 | 8.838 | 25 |
| 26 | 17.18 | 7.308 | 4.048 | 77.7 | 103 | 85.7 | 88.7 | 48.8 | 48.4 | 54.7 | 32.48 | 8.488 | 26 |
| 27 | 16.88 | 8.858 | 4.278 | 80.8 | 82.8 | 88.8 | 88.8 | 48.8 | 48.7 | 88.8 | 31.08 | 8.748 | 27 |
| 28 | 16.38 | 8.858 | 4.388 | 82.4 | 104 | 74.8 | 87.4 | 63.4 | 60.0 | 80.3 | 29.88 | 8.318 | 28 |
| 29 | 16.08 | | 4.388 | 84.4 | 86.0 | 80.4 | 80.4 | 78.8 | 48.8 | 61.3 | 28.78 | 8.318 | 29 |
| 30 | 16.58 | | 4.238 | 80.8 | 85.8 | 77.8 | 81.7 | 80.4 | 52.0 | 58.8 | 28.38 | 4.158 | 30 |
| 31 | 16.88 | | 4.098 | | 88.8 | | 88.8 | 81.0 | | 80.1 | | 4.128 | 31 |
| TOTAL | 683.0 | 302.88 | 148.28 | 885.21 | 2 882.1 | 2 832.3 | 3 177.4 | 1 737.6 | 1 781.7 | 1 882.8 | 1 340.1 | 488.87 | TOTAL |
| MEAN | 22.0 | 10.8 | 4.81 | 32.2 | 82.3 | 87.7 | 70.3 | 58.1 | 58.7 | 53.3 | 44.7 | 15.8 | MEAN |
| MAX | 30.2 | 14.3 | 6.58 | 86.4 | 128 | 120 | 81.3 | 80.7 | 78.4 | 61.3 | 87.6 | 37.3 | MAX |
| MIN | 16.0 | 6.88 | 3.74 | 4.24 | 71.7 | 71.4 | 84.3 | 41.8 | 46.3 | 32.8 | 28.3 | 4.13 | MIN |

### SUMMARY FOR THE YEAR 1989

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 45.8
MAXIMUM DAILY, 128 ON MAY 25
MINIMUM DAILY, 3.748 ON MAR 24
MAXIMUM INSTANTANEOUS,
158 AT 18:44 CST ON MAY 25

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 51 10 N
LONG 99 32 50 W
DRAINAGE AREA, 35 000 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 58 800 | JUL | 188 000 |
| FEB | 28 100 | AUG | 180 000 |
| MAR | 13 800 | SEP | 182 000 |
| APR | 83 600 | OCT | 143 000 |
| MAY | 247 000 | NOV | 118 000 |
| JUN | 227 000 | DEC | 42 200 |

TOTAL DISCHARGE, 1 450 000 dam³

## WEAVER LAKE AT OUTLET - STATION NO. 05RE002

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 27.706A | 27.680A | 27.700A | 27.703 | 27.782 | 27.821 | 28.481 | 28.181 | 28.103 | 28.091 | 28.339A | 28.261E | 1 |
| 2 | 27.707A | 27.685A | 27.702A | 27.701 | 27.788 | 27.822 | 28.438 | 28.178 | 28.107 | 28.080 | 28.304A | 28.263A | 2 |
| 3 | 27.707 | 27.687A | 27.703A | 27.700 | 27.785 | 27.826 | 28.433 | 28.183 | 28.118 | 28.058 | 28.271A | 28.246A | 3 |
| 4 | 27.708 | 27.687 | 27.703 | 27.701 | 27.737 | 27.888 | 28.441 | 28.228 | 28.100 | 28.068 | 28.373 | 28.240 | 4 |
| 5 | 27.708 | 27.681 | 27.702 | 27.702 | 27.748 | 27.874 | 28.442 | 28.280 | 28.108 | 28.041 | 28.374 | 28.226A | 5 |
| 6 | 27.708 | 27.682 | 27.703 | 27.703 | 27.785 | 28.004 | 28.418 | 28.288 | 28.118 | 28.048 | 28.378 | 28.219E | 6 |
| 7 | 27.701 | 27.680 | 27.705 | 27.701 | 27.778 | 28.023 | 28.418 | 28.288 | 28.091 | 28.077 | 28.378 | 28.212E | 7 |
| 8 | 27.701A | 27.680 | 27.707 | 27.700 | 27.771 | 28.023 | 28.418 | 28.280 | 28.117 | 28.074 | 28.379 | 28.206E | 8 |
| 9 | 27.702A | 27.682 | 27.707 | 27.700 | 27.788 | 28.035 | 28.384 | 28.282 | 28.118 | 28.070 | 28.378 | 28.188E | 9 |
| 10 | 27.688A | 27.691 | 27.708 | 27.700 | 27.778 | 28.058 | 28.397 | 28.284 | 28.110 | 28.078 | 28.383 | 28.180E | 10 |
| 11 | 27.703 | 27.684 | 27.700 | 27.688 | 27.788 | 28.083 | 28.393 | 28.284 | 28.122 | 28.051 | 28.388 | 28.184E | 11 |
| 12 | 27.703 | 27.686 | 27.700 | 27.688 | 27.780 | 28.132 | 28.374 | 28.283 | 28.107 | 28.058 | 28.388 | 28.178E | 12 |
| 13 | 27.708 | 27.683 | 27.702 | 27.687 | 27.773 | 28.136 | 28.368 | 28.288 | 28.108 | 28.059 | 28.384 | 28.168E | 13 |
| 14 | 27.705 | 27.682A | 27.701 | 27.688 | 27.773 | 28.130 | 28.342 | 28.282 | 28.118 | 28.081 | 28.385 | 28.163E | 14 |
| 15 | 27.702 | 27.683A | 27.700A | 27.687 | 27.770 | 28.182 | 28.337 | 28.244 | 28.110 | 28.091 | 28.383A | 28.158E | 15 |
| 16 | 27.703 | 27.682A | 27.700 | 27.688 | 27.777 | 28.188 | 28.331 | 28.243 | 28.118 | 28.088 | 28.378A | 28.148E | 16 |
| 17 | 27.700 | 27.682A | 27.688 | 27.702 | 27.777 | 28.180 | 28.323 | 28.237 | 28.118 | 28.083 | 28.374A | 28.144E | 17 |
| 18 | 27.701 | 27.686 | 27.700 | 27.701 | 27.788 | 28.185 | 28.332 | 28.228 | 28.108 | 28.077 | 28.388E | 28.138E | 18 |
| 19 | 27.700 | 27.686 | 27.700 | 27.701 | 27.788 | 28.218 | 28.311 | 28.220 | 28.108 | 28.078 | 28.382A | 28.132E | 19 |
| 20 | 27.688 | 27.686 | 27.688 | 27.688 | 27.788 | 28.287 | 28.300 | 28.202 | 28.088 | 28.091 | 28.380A | 28.126E | 20 |
| 21 | 27.702 | 27.686A | 27.687 | 27.704 | 27.783 | 28.288 | 28.287 | 28.188 | 28.084 | 28.088 | 28.337A | 28.120E | 21 |
| 22 | 27.701 | 27.686A | 27.688 | 27.710 | 27.778 | 28.280 | 28.283 | 28.188 | 28.087 | 28.083 | 28.328E | 28.114E | 22 |
| 23 | 27.687 | 27.686 | 27.686 | 27.718 | 27.784 | 28.310 | 28.270 | 28.192 | 28.090 | 28.080 | 28.318E | 28.108E | 23 |
| 24 | 27.686 | 27.686 | 27.684 | 27.722 | 27.840 | 28.320 | 28.263 | 28.176 | 28.073 | 28.085 | 28.306E | 28.102E | 24 |
| 25 | 27.687 | 27.686 | 27.688 | 27.727 | 27.818 | 28.348 | 28.248 | 28.167 | 28.078 | 28.082 | 28.300E | 28.088E | 25 |
| 26 | 27.687 | 27.700 | 27.685 | 27.730 | 27.822 | 28.382 | 28.217 | 28.144 | 28.081 | 28.088 | 28.291E | 28.088E | 26 |
| 27 | 27.686 | 27.701 | 27.685 | 27.738 | 27.832 | 28.407 | 28.232 | 28.133 | 28.081 | 28.130A | 28.283A | 28.083E | 27 |
| 28 | 27.686 | 27.701A | 27.684 | 27.740 | 27.853 | 28.422 | 28.218 | 28.147 | 28.048 | 28.187 | 28.280E | 28.078E | 28 |
| 29 | 27.686 | | 27.687 | 27.744 | 27.872 | 28.426 | 28.208 | 28.131 | 28.077 | 28.248 | 28.277A | 28.070E | 29 |
| 30 | 27.683 | | 27.700 | 27.748 | 27.888 | 28.441 | 28.192 | 28.132 | 28.100 | 28.282 | 28.288A | 28.088E | 30 |
| 31 | 27.689 | | 27.701 | | 27.905 | | 28.188 | 28.118 | | 28.334 | | 28.068A | 31 |
| MEAN | 27.701 | 27.683 | 27.700 | 27.708 | 27.793 | 28.170 | 28.330 | 28.214 | 28.088 | 28.103 | 28.349 | 28.184 | MEAN |
| MAX | 27.706 | 27.701 | 27.708 | 27.748 | 27.905 | 28.441 | 28.451 | 28.288 | 28.122 | 28.334 | 28.388 | 28.261 | MAX |
| MIN | 27.688 | 27.687 | 27.684 | 27.685 | 27.737 | 27.821 | 28.188 | 28.118 | 28.048 | 28.041 | 28.289 | 28.068 | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MEAN, 28.003
MAXIMUM DAILY, 28.451 ON JUL 1
MINIMUM DAILY, 27.687A ON FEB 3
MAXIMUM INSTANTANEOUS,
28.483 AT 18:38 CST ON JUL 3

WATER LEVELS ARE REFERRED TO ASSUMED DATUM

TYPE OF GAUGE - RECORDING
LOCATION - LAT 53 48 40 N
LONG 98 45 10 W

A - MANUAL GAUGE

E - ESTIMATED

NATURAL FLOW

DRAINAGE AREA,
8 650 km²

## WEIR RIVER ABOVE THE MOUTH - STATION NO. 05UH002

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.38B | 0.990B | 0.650B | 0.510B | --- | 80.2 | 76.4 | --- | --- | 13.6E | 10.8 B | 3.70B | 1 |
| 2 | 2.16B | 0.970B | 0.650B | 0.510B | --- | 78.4 | 76.6 | --- | --- | 13.6E | 10.8 B | 3.60B | 2 |
| 3 | 2.10B | 0.950B | 0.650B | 0.510B | --- | 78.3 | 82.1 | --- | --- | 13.3A | 10.5 B | 3.40B | 3 |
| 4 | 2.03B | 0.930B | 0.640B | 0.510B | --- | 78.3 | 87.6 | --- | --- | 13.3E | 10.2 B | 3.26B | 4 |
| 5 | 1.95B | 0.900B | 0.640B | 0.510B | --- | 78.1 | 88.1 | --- | --- | 13.1E | 9.90B | 3.13B | 5 |
| 6 | 1.87B | 0.880B | 0.630B | 0.510B | --- | 78.2 | 88.3 | --- | --- | 13.1E | 9.70B | 3.00B | 6 |
| 7 | 1.84B | 0.860B | 0.630B | 0.510B | --- | 78.4 | 89.8 | --- | --- | 12.9E | 9.30B | 2.80B | 7 |
| 8 | 1.80B | 0.840B | 0.620B | 0.510B | --- | 78.5 | 92.5 | --- | --- | 12.8E | 9.10B | 2.72B | 8 |
| 9 | 1.72B | 0.820B | 0.620B | 0.510B | --- | 78.6 | --- | --- | --- | 12.7E | 8.70B | 2.64B | 9 |
| 10 | 1.88B | 0.810B | 0.620B | 0.510B | --- | 78.4 | --- | --- | --- | 12.7E | 8.60B | 2.48B | 10 |
| 11 | 1.88B | 0.800B | 0.620B | 0.510B | --- | 78.3 | --- | --- | --- | 12.7E | 8.10B | 2.36B | 11 |
| 12 | 1.58B | 0.800B | 0.620B | 0.510B | --- | 78.3 | --- | --- | --- | 13.6E | 8.00B | 2.26B | 12 |
| 13 | 1.53B | 0.780B | 0.620B | 0.510B | --- | 78.3 | --- | --- | --- | 13.8E | 7.80B | 2.10B | 13 |
| 14 | 1.50B | 0.760B | 0.610B | 0.520B | --- | 78.3 | --- | --- | --- | 13.6E | 7.60B | 2.03B | 14 |
| 15 | 1.49B | 0.740B | 0.610B | 0.620B | --- | 78.3 | --- | --- | --- | 13.6E | 7.15B | 1.98B | 15 |
| 16 | 1.47B | 0.720B | 0.610B | 0.620B | --- | 78.5 | --- | --- | --- | 12.3E | 6.80B | 1.87B | 16 |
| 17 | 1.44B | 0.700B | 0.610B | 0.620B | --- | 78.6 | --- | --- | --- | 12.3E | 6.60B | 1.73B | 17 |
| 18 | 1.43B | 0.680B | 0.610B | 0.525B | --- | 79.1 | --- | --- | --- | 12.2E | 6.40B | 1.85B | 18 |
| 19 | 1.35B | 0.660B | 0.610B | 0.525B | --- | 81.6 | --- | --- | --- | 12.2E | 6.10B | 1.68B | 19 |
| 20 | 1.32B | 0.640B | 0.610B | 0.525B | --- | 84.3 | --- | --- | --- | 12.1E | 5.80B | 1.53B | 20 |
| 21 | 1.27B | 0.630B | 0.610B | 0.525B | --- | 85.4 | --- | --- | --- | 12.1E | 5.70B | 1.50B | 21 |
| 22 | 1.20B | 0.620B | 0.610B | 0.530B | --- | 85.3 | --- | --- | --- | 12.0E | 5.50B | 1.43B | 22 |
| 23 | 1.18B | 0.610B | 0.610B | 0.530B | --- | 83.8 | --- | --- | --- | 12.0E | 5.20B | 1.38B | 23 |
| 24 | 1.17B | 0.600B | 0.610B | 0.535B | --- | 81.3 | --- | --- | --- | 12.0E | 5.00B | 1.27B | 24 |
| 25 | 1.14B | 0.590B | 0.610B | 0.540B | --- | 79.2 | --- | --- | --- | 12.0E | 4.80B | 1.20B | 25 |
| 26 | 1.10B | 0.580B | 0.610B | 0.540B | --- | 78.6 | --- | --- | --- | 11.8E | 4.60B | 1.17B | 26 |
| 27 | 1.08B | 0.570B | 0.610B | 0.545B | --- | 78.5 | --- | --- | --- | 11.7E | 4.60B | 1.15B | 27 |
| 28 | 1.05B | 0.560B | 0.610B | 0.545B | --- | 78.5 | --- | --- | --- | 11.5E | 4.30B | 1.10B | 28 |
| 29 | 1.03B | | 0.610B | 0.550B | --- | 78.4 | --- | --- | --- | 11.3B | 4.10B | 1.07B | 29 |
| 30 | 1.01B | | 0.610B | 0.550B | --- | 78.3 | --- | --- | --- | 11.2B | 3.90B | 1.05B | 30 |
| 31 | 1.00B | | 0.610B | | 85.9A | | --- | --- | | 11.0B | | 1.03B | 31 |
| TOTAL | 48.43 | 20.880 | 18.125 | 16.710 | --- | 2 388.6 | --- | --- | --- | 383.6 | 215.35 | 83.92 | TOTAL |
| MEAN | 1.90 | 0.749 | 0.520 | 0.534 | --- | 79.8 | --- | --- | --- | 12.4 | 7.18 | 2.03 | MEAN |
| MAX | 2.38 | 0.990 | 0.650 | 0.550 | --- | 85.4 | --- | --- | --- | 13.6 | 10.8 | 3.70 | MAX |
| MIN | 1.00 | 0.560 | 0.510 | 0.510 | --- | 78.1 | --- | --- | --- | 11.0 | 3.90 | 1.03 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MINIMUM DAILY, 0.510B ON MAR 17

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 57 01 33 N
LONG 93 26 04 W
DRAINAGE AREA, 2 180 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 4 010 | JUL | --- |
| FEB | 1 810 | AUG | --- |
| MAR | 1 380 | SEP | --- |
| APR | 1 380 | OCT | 33 100 |
| MAY | --- | NOV | 18 800 |
| JUN | 206 000 | DEC | 8 440 |

## WEST HAWK LAKE AT WEST HAWK LAKE (CAMPGROUND) - STATION NO. 05PC003

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | --- | 332.824 | 332.807E | 332.780 | 332.752 | 332.557E | 332.482 | --- | 1 |
| 2 | --- | --- | --- | --- | 333.881 | 332.808 | 332.808E | 332.780 | 332.746 | 332.552E | --- | --- | 2 |
| 3 | --- | --- | --- | --- | --- | 332.808 | 332.805 | 332.783 | 332.742 | 332.547 | --- | --- | 3 |
| 4 | --- | --- | --- | --- | --- | 332.787 | 332.876 | 332.801 | 332.732 | 332.548E | --- | --- | 4 |
| 5 | --- | --- | --- | --- | --- | 332.787 | 332.876 | 332.803 | 332.732 | 332.844 | --- | --- | 5 |
| 6 | --- | --- | --- | --- | --- | 332.788 | 332.876 | 332.787 | 332.727 | 332.538E | --- | --- | 6 |
| 7 | --- | --- | --- | --- | --- | 332.807 | 332.882 | 332.778 | 332.717 | 332.834 | --- | --- | 7 |
| 8 | --- | --- | 332.343 | --- | --- | 332.812E | 332.842 | 332.767 | 332.707 | --- | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 332.718 | 332.818 | 332.838E | 332.785 | 332.697 | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 332.732E | 332.814 | 332.838 | 332.783 | 332.682 | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 332.745 | 332.813 | 332.822 | 332.782 | 332.682 | --- | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 332.749 | 332.838 | 332.827 | 332.743E | 332.672 | --- | --- | --- | 12 |
| 13 | --- | --- | --- | --- | 332.761 | 332.888 | 332.822 | 332.723E | 331.687 | --- | --- | --- | 13 |
| 14 | --- | --- | --- | --- | 332.787 | --- | 332.818E | 332.704 | 332.688 | --- | --- | --- | 14 |
| 15 | --- | --- | --- | --- | 332.788 | --- | 332.813 | 332.703 | 332.680E | --- | --- | --- | 15 |
| 16 | --- | --- | --- | --- | 332.778 | --- | 332.809E | 332.703 | 332.684E | --- | --- | --- | 16 |
| 17 | --- | --- | --- | 332.381 | 332.781 | --- | 332.804 | 332.682 | 332.668E | --- | --- | --- | 17 |
| 18 | --- | --- | --- | --- | 332.788E | --- | 332.804 | 332.747 | 332.662 | --- | --- | --- | 18 |
| 19 | --- | --- | --- | --- | 332.788 | --- | 332.783 | 332.786 | 332.637E | --- | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 332.808 | --- | 332.783 | 332.773E | 332.632 | --- | --- | --- | 20 |
| 21 | --- | --- | --- | --- | 333.809 | --- | 332.782 | 332.777E | 332.827 | --- | --- | --- | 21 |
| 22 | --- | --- | --- | --- | 332.809 | --- | 332.782 | 332.782 | 332.818E | --- | --- | --- | 22 |
| 23 | --- | --- | --- | --- | 332.810 | --- | 332.773 | 332.782 | 332.809 | 332.485 | --- | --- | 23 |
| 24 | --- | --- | --- | --- | 332.812 | --- | 332.787 | 332.785 | 332.801 | 332.481 | --- | --- | 24 |
| 25 | --- | --- | --- | 332.368 | 332.818 | --- | 332.783 | 332.782 | 332.804E | 332.487 | --- | --- | 25 |
| 26 | --- | --- | --- | --- | 333.834 | --- | 332.780 | 332.777 | 332.847 | 332.488 | --- | --- | 26 |
| 27 | --- | --- | --- | --- | 333.838E | --- | 332.782 | 332.787E | 332.882 | 332.481 | --- | --- | 27 |
| 28 | --- | --- | --- | --- | 333.843E | --- | 332.783 | 332.787 | 332.872 | 332.477 | --- | --- | 28 |
| 29 | --- | --- | --- | --- | 333.848 | 332.801 | 332.784 | 332.783 | 332.867E | 332.472 | --- | --- | 29 |
| 30 | --- | --- | --- | --- | 333.848 | 332.818 | 332.771 | 332.782 | 332.883E | 332.468 | --- | --- | 30 |
| 31 | --- | --- | --- | --- | 332.838 | | 332.780 | 332.782 | | 332.464 | --- | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | --- | 332.814 | 332.788 | 332.887 | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | 332.807 | 332.803 | 332.782 | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | --- | 332.780 | 332.682 | 332.682 | --- | --- | --- | MIN |

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - MANUAL
LOCATION - LAT 49 44 45 N
LONG 95 12 41 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1966

DRAINAGE AREA,
154 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## WEST SQUIRREL CREEK NEAR AUSTIN - STATION NO. 05LL001

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0 B | 0.0188 | 0.311 | 0.081 | 0.321 | 0.080 | 0.081 | 0.038 | --- | --- | 1 |
| 2 | --- | --- | 0 B | 0.6838 | 0.278 | 0.081 | 0.318 | 0.085 | 0.045 | 0.039 | --- | --- | 2 |
| 3 | --- | --- | 0 B | 0.8848 | 0.278 | 0.082 | 0.187 | 0.087 | 0.048 | 0.041 | --- | --- | 3 |
| 4 | --- | --- | 0 B | 1.35 B | 0.368 | 0.084 | 0.184 | 0.081 | 0.084 | 0.045 | --- | --- | 4 |
| 5 | --- | --- | 0 B | 1.39 B | 0.276 | 0.048 | 0.090 | 0.081 | 0.038 | 0.093 | --- | --- | 5 |
| 6 | --- | --- | 0 B | 1.04 B | 0.188 | 0.050 | 0.044 | 0.038 | 0.082 | 0.105 | --- | --- | 6 |
| 7 | --- | --- | 0 B | 0.732 | 0.178 | 0.107 | 0.038 | 0.028 | 0.083 | 0.048 | --- | --- | 7 |
| 8 | --- | --- | 0 B | 0.5618 | 0.187 | 0.082 | 0.037 | 0.024 | 0.080 | 0.044 | --- | --- | 8 |
| 9 | --- | --- | 0 B | 0.4208 | 0.320 | 0.088 | 0.035 | 0.021 | 0.041 | 0.040 | --- | --- | 9 |
| 10 | --- | --- | 0 B | 0.3078 | 0.248 | 0.058 | 0.030 | 0.018 | 0.038 | 0.038 | --- | --- | 10 |
| 11 | --- | --- | 0 B | 0.2388 | 0.174 | 0.068 | 0.030 | 0.010 | 0.085 | 0.037 | --- | --- | 11 |
| 12 | --- | --- | 0 B | 0.174 | 0.148 | 0.183 | 0.0300 | 0.008 | 0.187 | 0.038 | --- | --- | 12 |
| 13 | --- | --- | 0 B | 0.223 | 0.131 | 0.817 | 0.028 | 0.008 | 0.118 | 0.035 | --- | --- | 13 |
| 14 | --- | --- | 0 B | 0.384 | 0.105 | 1.23 | 0.026 | 0.018 | 0.081 | 0.035 | --- | --- | 14 |
| 15 | --- | --- | 0 B | 0.327 | 0.118 | 1.24 | 0.035 | 0.038 | 0.038 | 0.038 | --- | --- | 15 |
| 16 | --- | --- | 0 B | 0.384 | 0.138 | 0.872 | 0.023 | 0.024 | 0.035 | 0.037 | --- | --- | 16 |
| 17 | --- | --- | 0 B | 0.362 | 0.142 | 0.841 | 0.021 | 0.018 | 0.033 | 0.037 | --- | --- | 17 |
| 18 | --- | --- | 0 B | 0.322 | 0.133 | 0.438 | 0.018 | 0.030 | 0.031 | 0.038 | --- | --- | 18 |
| 19 | --- | --- | 0 B | 0.285 | 0.128 | 0.288 | 0.018 | 0.048 | 0.031 | 0.037 | --- | --- | 19 |
| 20 | --- | --- | 0 B | 0.240 | 0.128 | 0.220 | 0.018 | 0.045 | 0.034 | 0.038 | --- | --- | 20 |
| 21 | --- | --- | 0 B | 0.380 | 0.118 | 0.184 | 0.018 | 0.027 | 0.032 | 0.034 | --- | --- | 21 |
| 22 | --- | --- | 0 B | 0.373 | 0.081 | 0.148 | 0.058 | 0.043 | 0.031 | 0.034 | --- | --- | 22 |
| 23 | --- | --- | 0 B | 0.318 | 0.072 | 0.072 | 0.134 | 0.045 | 0.030 | 0.036 | --- | --- | 23 |
| 24 | --- | --- | 0 B | 0.384 | 0.103 | 0.058 | 0.038 | 0.036 | 0.028 | 0.038 | --- | --- | 24 |
| 25 | --- | --- | 0 B | 0.387 | 0.113 | 0.058 | 0.037 | 0.036 | 0.032 | 0.038 | --- | --- | 25 |
| 26 | --- | --- | 0 B | 0.418 | 0.118 | 0.078 | 0.024 | 0.035 | 0.078 | 0.037 | --- | --- | 26 |
| 27 | --- | --- | 0.0028 | 0.384 | 0.127 | 0.080 | 0.038 | 0.034 | 0.041 | 0.082 | --- | --- | 27 |
| 28 | --- | --- | 0.0068 | 0.462 | 0.148 | 0.082 | 0.037 | 0.033 | 0.038 | 0.048 | --- | --- | 28 |
| 29 | --- | --- | 0.0078 | 0.378 | 0.132 | 0.232 | 0.038 | 0.110 | 0.038 | 0.042 | --- | --- | 29 |
| 30 | --- | --- | 0.0088 | 0.334 | 0.148 | 0.388 | 0.082 | 0.088 | 0.038 | 0.040 | --- | --- | 30 |
| 31 | --- | --- | 0.0128 | | 0.108 | | 0.083 | 0.083 | | 0.038 | | --- | 31 |
| TOTAL | --- | --- | 0.035 | 13.630 | 5.273 | 5.155 | 1.814 | 1.317 | 1.482 | 1.334 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.001 | 0.454 | 0.170 | 0.272 | 0.082 | 0.042 | 0.048 | 0.043 | --- | --- | MEAN |
| MAX | --- | --- | 0.013 | 1.39 | 0.388 | 1.24 | 0.321 | 0.110 | 0.187 | 0.105 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.018 | 0.072 | 0.048 | 0.018 | 0.008 | 0.028 | 0.034 | --- | --- | MIN |

SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.135
MAXIMUM DAILY, 1.288 ON APR 4
MINIMUM DAILY, 0B ON MAR 1

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 58 00 N
LONG 98 56 50 W
DRAINAGE AREA, 136 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 185 |
| FEB | --- | AUG | 114 |
| MAR | 3.02 | SEP | 128 |
| APR 1 | 180 | OCT | 115 |
| MAY | 455 | NOV | --- |
| JUN | 705 | DEC | --- |

TOTAL DISCHARGE, 2 880 dam³

## WHITE LAKE AT WHITE LAKE CAMPGROUND - STATION NO. 05PE011

DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | --- | --- | 305.788E | 305.824E | 305.725 | --- | 305.877 | --- | 1 |
| 2 | --- | --- | --- | --- | 305.885 | --- | 305.781 | 305.818 | --- | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | --- | --- | 305.741E | 305.821E | --- | --- | --- | --- | 3 |
| 4 | --- | --- | --- | --- | --- | --- | 305.731 | 305.828E | --- | 305.734 | --- | --- | 4 |
| 5 | --- | --- | --- | --- | --- | --- | 305.730E | 305.831 | --- | --- | --- | --- | 5 |
| 6 | --- | --- | --- | --- | --- | --- | 305.730E | 305.821E | --- | --- | --- | --- | 6 |
| 7 | --- | --- | --- | --- | --- | --- | 305.728 | 305.811 | --- | --- | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 305.838 | --- | 305.720E | 305.808E | --- | --- | --- | --- | 8 |
| 9 | --- | --- | 305.760 | --- | --- | --- | 305.711 | 305.801 | --- | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | --- | --- | 305.711 | 305.795E | --- | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | --- | --- | 305.711 | 305.791 | 305.780 | 305.739 | --- | --- | 11 |
| 12 | --- | --- | --- | --- | --- | --- | 305.711 | 305.788E | 305.768E | --- | --- | --- | 12 |
| 13 | --- | --- | --- | --- | --- | --- | 305.711 | 305.781 | 305.772E | --- | --- | --- | 13 |
| 14 | --- | --- | --- | --- | --- | --- | 305.711 | 305.771E | 305.775 | --- | --- | --- | 14 |
| 15 | --- | --- | --- | --- | --- | --- | 305.711 | 305.761 | --- | --- | --- | --- | 15 |
| 16 | --- | --- | --- | --- | --- | --- | 305.701 | 305.841 | --- | --- | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 305.831 | --- | 305.701 | 305.823 | --- | --- | --- | --- | 17 |
| 18 | --- | --- | --- | --- | --- | --- | 305.694E | 305.821 | --- | --- | --- | --- | 18 |
| 19 | --- | --- | --- | --- | --- | --- | 305.688 | 305.861E | --- | --- | --- | --- | 19 |
| 20 | --- | --- | --- | --- | --- | --- | 305.675E | 305.861 | --- | --- | --- | --- | 20 |
| 21 | --- | --- | --- | --- | --- | --- | 305.671 | 305.868E | --- | --- | --- | --- | 21 |
| 22 | --- | --- | --- | --- | --- | --- | 305.661E | 305.891 | 305.773 | --- | --- | --- | 22 |
| 23 | --- | --- | --- | --- | --- | --- | 305.851 | 305.891 | --- | 305.711 | --- | --- | 23 |
| 24 | --- | --- | --- | --- | --- | 305.781 | 305.845E | 305.892E | --- | --- | --- | --- | 24 |
| 25 | --- | --- | --- | --- | --- | 305.771 | 305.839 | 305.893 | --- | --- | --- | --- | 25 |
| 26 | --- | --- | --- | --- | --- | 305.775E | 305.831E | 305.861 | --- | --- | --- | --- | 26 |
| 27 | --- | --- | --- | --- | --- | 305.781 | 305.824E | 305.861 | --- | --- | --- | --- | 27 |
| 28 | --- | --- | --- | --- | --- | 305.775E | 305.818 | 305.875E | --- | --- | --- | --- | 28 |
| 29 | --- | --- | --- | --- | --- | 305.771 | 305.824E | 305.891 | --- | --- | --- | --- | 29 |
| 30 | --- | --- | --- | --- | --- | 305.784E | 305.831 | 305.902E | --- | --- | --- | --- | 30 |
| 31 | --- | --- | --- | --- | --- | --- | 305.831 | 305.714E | --- | --- | --- | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | --- | 305.883 | 305.808 | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | 305.788 | 305.714 | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | --- | 305.815 | 305.831 | --- | --- | --- | --- | MIN |

SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 50 02 03 N
LONG 95 30 46 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1968

DRAINAGE AREA,
835 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## WHITEMOUTH LAKE NEAR THE OUTLET - STATION NO. 05PH005

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 343.871 | 343.807 | --- | 344.018 | 344.018 | 343.837 | 343.808 | --- | 1 |
| 2 | --- | --- | --- | --- | 343.873 | 343.880 | --- | 344.017 | 344.023 | 343.830 | 343.828A | --- | 2 |
| 3 | --- | --- | --- | --- | 343.877 | 343.888 | --- | 344.013 | 344.041 | 343.884 | --- | --- | 3 |
| 4 | --- | --- | --- | --- | 343.885 | 343.887 | --- | 344.018 | 344.018 | 343.880 | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 343.788 | 343.877 | 344.088A | 343.988 | 344.020 | 343.883 | --- | --- | 5 |
| 6 | --- | --- | --- | --- | 343.875 | 343.880 | 344.062 | 343.983 | 344.027 | 343.928 | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 343.880 | 343.888 | 344.084 | 343.988 | 344.018 | 343.882 | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 343.888 | 343.885 | 344.081 | 343.991 | 344.007 | 343.858 | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 343.886 | 343.885 | 344.080 | 343.985 | 344.004 | 343.851 | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 343.899 | 343.900 | 344.068 | 343.988 | 344.007 | 343.887 | --- | --- | 10 |
| 11 | --- | --- | --- | --- | 343.918 | 343.907 | 344.058 | 343.898 | 344.008 | 343.843 | --- | --- | 11 |
| 12 | --- | --- | --- | --- | 343.893 | 343.928 | 344.057 | 343.898 | 344.007 | 343.848 | --- | --- | 12 |
| 13 | --- | --- | --- | 343.883A | 343.881 | 343.921 | 344.056 | 343.875 | 344.027 | 343.858 | --- | --- | 13 |
| 14 | --- | --- | --- | 343.900A | 343.880 | 343.938 | 344.051 | 343.872 | 344.012 | 343.851 | --- | --- | 14 |
| 15 | --- | --- | --- | 343.902A | 343.880 | 343.936 | 344.070 | 343.874 | 344.028 | 343.938 | --- | --- | 15 |
| 16 | --- | --- | --- | 343.888A | 343.881 | 343.948 | 344.072 | 343.873 | 344.008 | 343.848 | --- | --- | 16 |
| 17 | --- | --- | --- | 343.878A | 343.910 | 343.942 | 344.071 | 343.884 | 344.032 | 343.840 | --- | --- | 17 |
| 18 | --- | --- | --- | 343.888A | 343.907 | 343.927A | 344.082 | 344.008 | 344.033 | 343.848 | --- | --- | 18 |
| 19 | --- | --- | --- | 343.857A | 343.898 | --- | 344.084 | 344.028 | 343.898 | 343.859 | --- | --- | 19 |
| 20 | --- | --- | --- | 343.851 | 343.894 | --- | 344.082 | 344.024 | 344.002 | 343.844 | --- | --- | 20 |
| 21 | --- | --- | --- | 343.850 | 343.898 | --- | 344.082 | 344.038 | 343.893 | 343.852 | --- | --- | 21 |
| 22 | --- | --- | --- | 343.853 | 343.888 | --- | 344.083 | 344.038 | 343.934 | 343.844 | --- | --- | 22 |
| 23 | --- | --- | --- | 343.884 | 343.884 | --- | 344.088 | 344.048 | 343.888 | 343.841 | --- | --- | 23 |
| 24 | --- | --- | --- | 343.859 | 343.900 | --- | 344.080 | 344.088 | 344.003 | 343.848 | --- | --- | 24 |
| 25 | --- | --- | --- | 343.884 | 343.898 | --- | 344.048 | 344.080 | 343.888 | 343.847 | --- | --- | 25 |
| 26 | --- | --- | --- | 343.885 | 343.884 | --- | 344.018 | 344.038 | 343.882 | 343.884 | --- | --- | 26 |
| 27 | --- | --- | --- | 343.885 | 343.932 | --- | 344.012 | 344.028 | 343.883 | 344.008 | --- | --- | 27 |
| 28 | --- | --- | --- | 343.888 | 343.897 | --- | 344.025 | 344.039 | 343.886 | 343.833 | --- | --- | 28 |
| 29 | --- | --- | --- | 343.871 | 343.902 | --- | 344.024 | 344.013 | 343.875 | 343.824 | --- | --- | 29 |
| 30 | --- | --- | --- | 343.887 | 343.907 | --- | 344.007 | 344.022 | 343.884 | 343.826 | --- | --- | 30 |
| 31 | --- | | --- | | 343.908 | | 344.008 | 344.018 | | 343.818 | | --- | 31 |
| MEAN | --- | --- | --- | --- | 343.888 | --- | --- | 344.010 | 344.003 | 343.847 | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 343.932 | --- | --- | 344.088 | 344.041 | 344.008 | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 343.788 | --- | --- | 343.872 | 343.834 | 343.818 | --- | --- | MIN |

WATER LEVELS IN METRES

MAXIMUM DAILY, 344.072 ON JUL 16

MAXIMUM INSTANTANEOUS, 344.128 AT 09:59 CST ON SEP 3

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1929 ADJ.)

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 15 40 N
LONG 95 41 50 W

A - MANUAL GAUGE

REGULATED

DRAINAGE AREA, 294 km²

## WHITEMOUTH RIVER NEAR WHITEMOUTH - STATION NO. 05PH003

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.1378 | 0.1198 | 0.2338 | 0.2128 | 28.3 | 30.6 | 33.6 | 2.80 | 11.6 | 2.26 | 2.81 | 0.7728 | 1 |
| 2 | 0.1088 | 0.0878 | 0.2218 | 0.2838 | 28.2 | 17.6 | 34.3 | 3.14 | 10.9 | 2.26 | 2.38 B | 0.7638 | 2 |
| 3 | 0.0878 | 0.0488 | 0.2468 | 0.3528 | 27.7 | 15.5 | 34.8 | 3.74 | 9.72 | 2.15 | 2.31 B | 0.8468 | 3 |
| 4 | 0.1128 | 0.0478 | 0.2428 | 0.5088 | 27.7 | 13.5 | 34.0 | 7.01 | 8.72 | 2.06 | 2.27 B | 0.8758 | 4 |
| 5 | 0.0858 | 0.0618 | 0.2898 | 0.5708 | 28.5 | 12.0 | 35.2 | 11.5 | 7.86 | 2.16 | 2.24 B | 0.8958 | 5 |
| 6 | 0.0448 | 0.0818 | 0.2588 | 0.5068 | 28.5 | 10.9 | 39.1 | 12.8 | 7.09 | 2.22 | 2.23 B | 0.7398 | 6 |
| 7 | 0.0438 | 0.1488 | 0.2678 | 0.4908 | 28.1 | 15.6 | 34.8 | 12.2 | 6.76 | 2.16 | 2.21 B | 0.8318 | 7 |
| 8 | 0.0358 | 0.1878 | 0.3108 | 0.4208 | 27.3 | 27.8 | 30.0 | 10.4 | 6.24 | 2.16 | 2.19 B | 0.8418 | 8 |
| 9 | 0.0188 | 0.1588 | 0.3768 | 0.8898 | 26.3 | 32.8 | 28.0 | 8.26 | 5.82 | 2.26 | 2.20 B | 0.8288 | 9 |
| 10 | 0.0139 | 0.1718 | 0.3468 | 0.7698 | 25.0 | 33.6 | 32.3 | 8.33 | 5.50 | 2.33 | 2.23 B | 0.7688 | 10 |
| 11 | 0.0098 | 0.2048 | 0.3568 | 0.8768 | 23.8 | 31.1 | 18.7 | 5.08 | 5.16 | 2.32 | 2.26 B | 0.8578 | 11 |
| 12 | 0.0118 | 0.2128 | 0.3828 | 1.82 B | 31.6 | 28.7 | 16.6 | 4.30 | 5.28 | 2.36 | 2.27 B | 0.9478 | 12 |
| 13 | 0.0148 | 0.1928 | 0.3928 | 1.81 B | 19.6 | 38.6 | 15.4 | 3.86 | 5.46 | 2.31 | 2.18 B | 0.8718 | 13 |
| 14 | 0.0188 | 0.1768 | 0.3428 | 2.32 B | 17.6 | 47.6 | 14.6 | 3.76 | 5.49 | 2.31 | 2.08 B | 0.8868 | 14 |
| 15 | 0.0188 | 0.1028 | 0.2008 | 4.10 B | 16.2 | 53.8 | 13.4 | 3.42 | 5.85 | 2.41 | 1.76 B | 0.7848 | 15 |
| 16 | 0.0118 | 0.1068 | 0.1808 | 11.3 B | 14.7 | 54.7 | 11.8 | 3.10 | 5.17 | 2.65 | 1.58 B | 0.6498 | 16 |
| 17 | 0.0178 | 0.0818 | 0.1368 | 12.0 B | 13.5 | 51.7 | 10.8 | 2.90 | 4.72 | 3.00 | 1.55 B | 0.6848 | 17 |
| 18 | 0.0188 | 0.0858 | 0.1258 | 8.27 B | 13.0 | 47.0 | 9.85 | 2.87 | 4.40 | 2.26 | 1.42 B | 0.6548 | 18 |
| 19 | 0.0198 | 0.0958 | 0.1498 | 10.9 B | 13.3 | 41.5 | 8.72 | 8.20 | 4.10 | 3.29 | 1.31 B | 0.6818 | 19 |
| 20 | 0.0188 | 0.1198 | 0.2008 | 18.5 B | 14.5 | 37.0 | 7.77 | 21.1 | 3.84 | 3.11 | 1.20 B | 0.7918 | 20 |
| 21 | 0.0188 | 0.1288 | 0.1828 | 15.9 B | 15.2 | 34.3 | 8.46 | 26.9 | 3.82 | 3.04 | 1.14 B | 0.8298 | 21 |
| 22 | 0.0188 | 0.1168 | 0.1428 | 20.7 B | 14.9 | 36.1 | 8.46 | 32.5 | 3.66 | 3.01 | 1.06 B | 0.7128 | 22 |
| 23 | 0.0188 | 0.1038 | 0.1608 | 23.1 B | 13.6 | 36.2 | 4.80 | 31.9 | 3.16 | 3.00 | 0.9878 | 0.6818 | 23 |
| 24 | 0.0118 | 0.1298 | 0.1588 | 26.3 B | 12.2 | 35.1 | 3.99 | 28.4 | 3.03 | 2.90 | 0.9028 | 0.6438 | 24 |
| 25 | 0.0138 | 0.2178 | 0.1638 | 26.8 | 14.0 | 34.6 | 3.87 | 24.3 | 3.02 | 2.87 | 0.8208 | 0.8818 | 25 |
| 26 | 0.0218 | 0.2508 | 0.1778 | 27.0 | 18.8 | 36.2 | 3.18 | 20.3 | 2.77 | 2.83 | 0.7638 | 0.8128 | 26 |
| 27 | 0.0548 | 0.2418 | 0.1818 | 27.6 | 23.9 | 32.6 | 2.78 | 16.7 | 2.83 | 2.78 | 0.7468 | 0.7888 | 27 |
| 28 | 0.1188 | 0.2188 | 0.1868 | 27.8 | 28.2 | 28.6 | 2.48 | 14.0 | 2.68 | 2.75 | 0.7298 | 0.8388 | 28 |
| 29 | 0.1468 | | 0.1878 | 28.1 | 28.5 | 27.8 | 2.45 | 12.6 | 2.34 | 3.06 | 0.8678 | 0.8268 | 29 |
| 30 | 0.1438 | | 0.2068 | 28.2 | 28.1 | 28.4 | 2.39 | 12.2 | 2.29 | 3.23 | 0.8668 | 0.8678 | 30 |
| 31 | 0.1498 | | 0.2128 | | 23.6 | | 2.50 | 12.3 | | 2.76 | | 0.8868 | 31 |
| TOTAL | 1.803 | 3.888 | 7.218 | 333.068 | 668.5 | 960.5 | 481.80 | 371.42 | 158.76 | 81.35 | 48.880 | 23.081 | TOTAL |
| MEAN | 0.048 | 0.138 | 0.233 | 11.1 | 21.2 | 32.0 | 15.8 | 12.0 | 5.29 | 2.62 | 1.63 | 0.745 | MEAN |
| MAX | 0.148 | 0.250 | 0.392 | 28.2 | 28.5 | 54.7 | 39.1 | 32.5 | 11.6 | 3.29 | 2.81 | 0.871 | MAX |
| MIN | 0.009 | 0.047 | 0.126 | 0.212 | 12.2 | 10.8 | 2.39 | 2.50 | 2.29 | 2.06 | 0.868 | 0.484 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 6.66
MAXIMUM DAILY, 54.7 ON JUN 16
MINIMUM DAILY, 0.0088 ON JAN 11
MAXIMUM INSTANTANEOUS, 59.5 AT 10:30 CST ON JUN 16

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 56 20 N
LONG 95 57 30 W
DRAINAGE AREA, 3 760 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 130 | JUL | 42 500 |
| FEB | 333 | AUG | 32 100 |
| MAR | 623 | SEP | 13 700 |
| APR | 28 800 | OCT | 7 030 |
| MAY | 66 900 | NOV | 4 230 |
| JUN | 83 000 | DEC | 1 990 |

TOTAL DISCHARGE, 371 000 dam³

## WHITEMUD RIVER ABOVE GLADSTONE DAM - STATION NO. 05LL010

### DAILY WATER LEVEL IN METRES FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | 289.133 | 289.072 | 288.932 | 288.867 | 288.932 | 288.942 | 289.027 | --- | 1 |
| 2 | --- | --- | --- | --- | 289.108E | 289.082 | 288.947 | 288.882 | 288.912 | 288.937 | 289.042 | --- | 2 |
| 3 | --- | --- | --- | --- | 289.088E | 289.082 | 288.937 | 288.882 | 288.912 | 288.937 | 289.047 | --- | 3 |
| 4 | --- | --- | --- | --- | 289.072 | 289.057E | 288.932 | 288.882 | 288.912 | 288.942 | 289.047 | --- | 4 |
| 5 | --- | --- | --- | --- | 289.082 | 289.052 | 288.932 | 288.882 | 288.907 | 288.942 | 288.882 | --- | 5 |
| 6 | --- | --- | --- | --- | 289.082 | 289.042 | 288.932 | 288.867 | 288.912 | 288.927 | --- | --- | 6 |
| 7 | --- | --- | --- | --- | 289.082 | 289.042 | 288.932 | 288.867 | 288.907 | 288.912 | --- | --- | 7 |
| 8 | --- | --- | --- | --- | 289.072 | 289.042 | 288.922 | 288.867 | 288.902 | 288.893 | --- | --- | 8 |
| 9 | --- | --- | --- | --- | 289.082 | 289.042 | 288.922 | 288.852 | 288.902 | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | 289.083E | 289.042 | 288.922 | 288.867 | 288.902 | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | --- | 289.082 | 289.082 | 288.932 | 288.862 | 288.902 | --- | --- | 11 |
| 12 | --- | --- | --- | 289.132 | 289.057E | 289.082E | 288.932 | 288.932 | 288.902 | --- | --- | --- | 12 |
| 13 | --- | --- | --- | 289.128E | 289.052 | 289.112 | 288.932 | 288.817 | 288.912 | --- | --- | --- | 13 |
| 14 | --- | --- | --- | 289.125E | 289.056E | 289.102 | 288.932 | 288.883 | 288.902 | --- | --- | --- | 14 |
| 15 | --- | --- | --- | 289.122 | 289.057E | 289.142 | 288.932 | 288.833 | 288.892 | 288.912 | --- | --- | 15 |
| 16 | --- | --- | --- | 289.032 | 289.080E | 289.122 | 288.932E | 288.882 | 288.892 | 288.917 | --- | --- | 16 |
| 17 | --- | --- | --- | 289.028E | 289.082 | 289.082 | 288.932 | 288.897 | 288.882 | 288.932 | --- | --- | 17 |
| 18 | --- | --- | --- | 289.025E | 289.052 | 289.052 | 288.942 | 288.912 | 288.882 | 288.937 | --- | --- | 18 |
| 19 | --- | --- | --- | 289.022 | 289.052 | 289.022 | 288.932 | 288.922 | 288.882 | 288.942 | --- | --- | 19 |
| 20 | --- | --- | --- | 289.042 | 289.052 | 289.012 | 288.922 | 288.912 | 288.902 | 288.937 | --- | --- | 20 |
| 21 | --- | --- | --- | 289.042 | 289.047 | 288.972 | 288.912 | 288.912 | 288.912 | 288.932 | --- | --- | 21 |
| 22 | --- | --- | --- | 289.112 | 289.052 | 288.972 | 288.912 | 288.922 | 288.937 | 288.942 | --- | --- | 22 |
| 23 | --- | --- | --- | 289.117E | 289.052 | 288.972 | 288.912 | 288.922 | 288.972 | 288.942 | --- | --- | 23 |
| 24 | --- | 288.895 | --- | 289.122 | 289.052E | 288.972 | 288.907 | 288.922 | 288.972 | 288.942 | --- | --- | 24 |
| 25 | --- | --- | --- | 289.142 | 289.052E | 288.857 | 288.892 | 288.922 | 288.972 | 288.952 | --- | --- | 25 |
| 26 | --- | --- | --- | 289.142E | 289.052 | 288.952 | 288.972 | 288.917 | 288.977 | 288.952 | --- | --- | 26 |
| 27 | --- | --- | --- | 289.142E | 289.052 | 288.942 | 288.972 | 288.912 | 288.972 | 289.017 | --- | --- | 27 |
| 28 | --- | --- | --- | 289.142 | 289.052 | 288.942 | 288.972 | 288.912 | 288.952 | 289.022 | --- | --- | 28 |
| 29 | --- | | --- | 289.132 | 289.062E | 288.932 | 288.862 | 288.912 | 288.957 | 289.022 | --- | --- | 29 |
| 30 | --- | | --- | 289.122 | 289.072 | 288.932 | 288.857 | 288.912 | 288.892 | 289.022 | --- | --- | 30 |
| 31 | --- | | --- | | 289.072 | | 288.857 | 288.912 | | 289.022 | | --- | 31 |
| MEAN | --- | --- | --- | --- | 289.086 | 289.028 | 288.914 | 288.882 | 288.821 | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | 289.122 | 289.142 | 288.947 | 288.922 | 288.977 | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | 289.047 | 288.932 | 288.857 | 288.817 | 288.882 | --- | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - MANUAL
LOCATION - LAT 50 13 30 N
LONG 98 55 44 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

E - ESTIMATED

REGULATED SINCE 1942

DRAINAGE AREA,
1 880 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## WHITEMUD RIVER AT WESTBOURNE - STATION NO. 05LL002

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.2658 | 0.1728 | 0.2458 | 0.2988 | 3.85 | 1.42 | 1.24 | 0.178 | 0.328 | 0.210E | 0.655 | 0.3988 | 1 |
| 2 | 0.2608 | 0.1768 | 0.2478 | 0.3658 | 4.60 | 1.38 | 1.24 | 0.240 | 0.318 | 0.104E | 0.600 | 0.3808 | 2 |
| 3 | 0.2618 | 0.1718 | 0.2398 | 0.7898 | 4.88 | 1.30 | 1.74 | 0.618 | 0.307 | 0.068E | 0.819 | 0.2848 | 3 |
| 4 | 0.2608 | 0.1718 | 0.2398 | 3.08 B | 4.10 | 1.18 | 1.78 | 0.528 | 0.342 | 0.147E | 0.884 | 0.2688 | 4 |
| 5 | 0.2398 | 0.1728 | 0.2328 | 5.78 B | 3.38 | 1.12 | 1.84 | 0.583 | 0.380 | 0.182E | 0.671 | 0.2648 | 5 |
| 6 | 0.2368 | 0.1788 | 0.2328 | 8.80 B | 2.84 | 1.02 | 1.42 | 0.670 | 0.364 | 0.291E | 0.883 | 0.2888 | 6 |
| 7 | 0.2278 | 0.1818 | 0.2288 | 9.21 B | 2.61 | 1.03 | 1.26 | 0.552 | 0.244 | 0.381E | 0.877 | 0.2878 | 7 |
| 8 | 0.1928 | 0.1778 | 0.2258 | 10.2 B | 2.36 | 1.00 | 1.16 | 0.531 | 0.213 | 0.254E | 0.788 | 0.2828 | 8 |
| 9 | 0.1578 | 0.1808 | 0.2188 | 9.66 A | 2.13 | 1.00 | 1.10 | 0.477 | 0.205 | 0.132E | 0.678 | 0.2838 | 9 |
| 10 | 0.1158 | 0.1788 | 0.2188 | 9.36 | 1.84 | 1.01 | 1.04 | 0.887 | 0.210 | 0.083E | 1.04 | 0.3308 | 10 |
| 11 | 0.0848 | 0.1788 | 0.2188 | 8.38 | 1.74 | 1.18 | 0.872 | 0.584 | 0.322 | 0.210E | 0.8338 | 0.3388 | 11 |
| 12 | 0.1088 | 0.1818 | 0.2148 | 7.70 | 1.71 | 2.72 | 0.880 | 0.548 | 0.238 | 0.331E | 0.8508 | 0.3228 | 12 |
| 13 | 0.1288 | 0.1888 | 0.2288 | 7.28 | 1.71 | 5.26 | 0.825 | 0.550 | 0.217 | 0.331E | 0.8388 | 0.3288 | 13 |
| 14 | 0.1488 | 0.1878 | 0.2268 | 6.82 | 1.60 | 4.32 | 0.868 | 0.451 | 0.178 | 0.328E | 0.8048 | 0.3078 | 14 |
| 15 | 0.1618 | 0.2068 | 0.2268 | 6.01 | 1.47 | 7.10 | 0.817 | 0.238 | 0.016 | 0.348E | 0.7768 | 0.2888 | 15 |
| 16 | 0.1688 | 0.2248 | 0.2268 | 5.77 | 1.48 | 8.81 | 0.821 | 0.047 | 0.072 | 0.314E | 0.7898 | 0.2828 | 16 |
| 17 | 0.1648 | 0.2388 | 0.2288 | 4.87 | 1.43 | 8.36 | 0.773 | 0.002 | 0.228 | 0.306E | 0.7048 | 0.2848 | 17 |
| 18 | 0.1608 | 0.2118 | 0.2328 | 5.07 | 1.46 | 8.80 | 0.814 | 0.051 | 0.230 | 0.289E | 0.6268 | 0.2688 | 18 |
| 19 | 0.1648 | 0.1988 | 0.2328 | 5.84 | 1.46 | 8.54 | 0.873 | 0.483 | 0.241 | 0.344A | 0.6018 | 0.2388 | 19 |
| 20 | 0.1808 | 0.2018 | 0.2328 | 6.37 | 1.38 | 4.29 | 0.487 | 0.498 | 0.200 | 0.437 | 0.5918 | 0.2048 | 20 |
| 21 | 0.1888 | 0.2178 | 0.2328 | 5.94 | 1.34 | 3.28 | 0.277 | 0.428 | 0.044 | 0.586 | 0.5828 | 0.1898 | 21 |
| 22 | 0.1888 | 0.2218 | 0.2388 | 5.88 | 1.28 | 2.74 | 0.048 | 0.438 | 0.038 | 0.587 | 0.5748 | 0.1748 | 22 |
| 23 | 0.1868 | 0.2628 | 0.2388 | 4.80 | 1.21 | 2.21 | 0 | 0.458 | 0.088 | 0.672 | 0.5508 | 0.1678 | 23 |
| 24 | 0.1718 | 0.2728 | 0.2478 | 4.11 | 1.18 | 1.87 | 0 | 0.481 | 0.124 | 0.695 | 0.5658 | 0.1778 | 24 |
| 25 | 0.1708 | 0.2788 | 0.2478 | 3.78 A | 1.18 | 1.82 | 0 | 0.488 | 0.123 | 0.712 | 0.5288 | 0.1838 | 25 |
| 26 | 0.1888 | 0.2788 | 0.2478 | 4.24 A | 1.17 | 1.65 | 0 | 0.480 | 0.100 | 0.731 | 0.5278 | 0.1888 | 26 |
| 27 | 0.1868 | 0.2898 | 0.2848 | 5.08 | 1.16 | 1.37 | 0 | 0.448 | 0.068 | 0.736 | 0.5098 | 0.2038 | 27 |
| 28 | 0.1708 | 0.2908 | 0.2548 | 4.78 | 1.17 | 1.28 | 0 | 0.421 | 0.098 | 0.831 | 0.4578 | 0.2048 | 28 |
| 29 | 0.1748 | | 0.2628 | 4.34 | 1.26 | 1.28 | 0.031 | 0.388 | 0.131 | 0.874 | 0.4208 | 0.2108 | 29 |
| 30 | 0.1708 | | 0.2628 | 4.35 A | 1.36 | 1.30 | 0.107 | 0.384 | 0.184 | 0.815 | 0.4088 | 0.2238 | 30 |
| 31 | 0.1718 | | 0.2888 | | 1.38 | | 0.138 | 0.338 | | 0.838 | | 0.2278 | 31 |
| TOTAL | 5.639 | 5.788 | 7.328 | 187.483 | 81.84 | 88.02 | 22.128 | 13.847 | 5.709 | 12.158 | 18.788 | 8.108 | TOTAL |
| MEAN | 0.175 | 0.207 | 0.236 | 5.98 | 1.88 | 2.83 | 0.714 | 0.414 | 0.180 | 0.382 | 0.659 | 0.262 | MEAN |
| MAX | 0.285 | 0.298 | 0.288 | 10.2 | 4.80 | 8.36 | 1.78 | 0.677 | 0.380 | 0.736 | 1.04 | 0.399 | MAX |
| MIN | 0.084 | 0.171 | 0.218 | 0.288 | 1.16 | 1.00 | 0 | 0.002 | 0.014 | 0.088 | 0.488 | 0.187 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 1.16
MAXIMUM DAILY, 10.28 ON APR 8
MINIMUM DAILY, 0 ON JUL 23

### SUMMARY FOR THE YEAR 1988

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 08 03 N
LONG 98 35 00 W
DRAINAGE AREA, 6 380 km²
A - MANUAL GAUGE
B - ICE CONDITIONS
E - ESTIMATED
REGULATED SINCE 1980

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 470 | JUL | 1 910 |
| FEB | 401 | AUG | 1 110 |
| MAR | 633 | SEP | 483 |
| APR | 14 800 | OCT | 1 050 |
| MAY | 6 320 | NOV | 1 710 |
| JUN | 7 600 | DEC | 701 |

TOTAL DISCHARGE, 38 000 dam³

## WHITEMUD RIVER NEAR KEYES - STATION NO. 05LL005

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.1288 | 0.1288 | 0.0688 | 0.5808 | 0.619 | 0.412 | 0.288 | 0.042 | 0.192 | 0.184 | 0.208 | 0.1908 | 1 |
| 2 | 0.1308 | 0.1388 | 0.0738 | 0.7878 | 0.735 | 0.347 | 0.283 | 0.036 | 0.214 | 0.073 | 0.200 | 0.1838 | 2 |
| 3 | 0.1348 | 0.1308 | 0.0788 | 1.33 B | 0.678 | 0.301 | 0.268 | 0.041 | 0.216 | 0.052 | 0.197 | 0.1788 | 3 |
| 4 | 0.1348 | 0.1188 | 0.0728 | 1.67 B | 0.675 | 0.281 | 0.178 | 0.044 | 0.171 | 0.044 | 0.200 | 0.2178 | 4 |
| 5 | 0.1358 | 0.1048 | 0.0898 | 1.84 B | 0.823 | 0.189 | 0.148 | 0.040 | 0.141 | 0.091 | 0.273A | 0.2538 | 5 |
| 6 | 0.1338 | 0.0988 | 0.0688 | 1.35 B | 0.578 | 0.207A | 0.142 | 0.038 | 0.120 | 0.173 | 0.245 | 0.2048 | 6 |
| 7 | 0.1458 | 0.0978 | 0.0678 | 1.10 B | 0.481 | 0.211A | 0.124 | 0.031 | 0.108 | 0.207 | 0.168 | 0.1468 | 7 |
| 8 | 0.1448 | 0.0958 | 0.0678 | 1.26 B | 0.428 | 0.246A | 0.122 | 0.028 | 0.112 | 0.193 | 0.138 | 0.1538 | 8 |
| 9 | 0.1188 | 0.0968 | 0.0678 | 1.37 B | 0.449 | 0.234A | 0.131 | 0.028 | 0.110 | 0.123 | 0.148 | 0.1818 | 9 |
| 10 | 0.0988 | 0.0948 | 0.0718 | 1.18 B | 0.382 | 0.222A | 0.128 | 0.028 | 0.111 | 0.118 | 0.140 | 0.1988 | 10 |
| 11 | 0.0808 | 0.0958 | 0.0738 | 0.9948 | 0.308 | 0.305A | 0.108 | 0.018 | 0.116 | 0.122 | 0.1188 | 0.2088 | 11 |
| 12 | 0.0888 | 0.0988 | 0.0758 | 0.9938 | 0.318 | 0.850A | 0.173 | 0.037 | 0.100 | 0.128 | 0.1518 | 0.1948 | 12 |
| 13 | 0.0888 | 0.0938 | 0.0788 | 0.8688 | 0.375 | 1.06 A | 0.234 | 0.062 | 0.083 | 0.138 | 0.2038 | 0.1738 | 13 |
| 14 | 0.0908 | 0.0888 | 0.0808 | 0.8538 | 0.354 | 1.61 A | 0.228 | 0.058 | 0.094 | 0.137 | 0.1498 | 0.1448 | 14 |
| 15 | 0.0908 | 0.1008 | 0.0808 | 0.9178 | 0.438 | 1.33 A | 0.477 | 0.178 | 0.090 | 0.127 | 0.1938 | 0.1288 | 15 |
| 16 | 0.0908 | 0.1028 | 0.0848 | 0.9588 | 0.400 | 1.03 A | 0.360 | 0.297 | 0.078 | 0.298 | 0.1288 | 0.1358 | 16 |
| 17 | 0.0908 | 0.0958 | 0.0858 | 0.7848 | 0.380 | 0.868A | 0.242 | 0.222 | 0.071 | 0.308 | 0.1318 | 0.1298 | 17 |
| 18 | 0.0938 | 0.0888 | 0.0818 | 0.6188 | 0.348 | 0.641A | 0.167 | 0.180 | 0.149 | 0.281 | 0.1298 | 0.1358 | 18 |
| 19 | 0.0958 | 0.0838 | 0.0898 | 1.00 B | 0.342 | 0.752A | 0.127 | 0.226 | 0.110 | 0.228 | 0.1888 | 0.1178 | 19 |
| 20 | 0.0958 | 0.0818 | 0.0848 | 0.9288 | 0.345 | 0.893A | 0.108 | 0.229 | 0.071 | 0.229 | 0.2148 | 0.0988 | 20 |
| 21 | 0.1008 | 0.0788 | 0.0888 | 0.778 | 0.354 | 0.595 | 0.088 | 0.288 | 0.047 | 0.235 | 0.2028 | 0.0838 | 21 |
| 22 | 0.1018 | 0.0778 | 0.0888 | 0.750 | 0.350 | 0.500 | 0.078 | 0.300 | 0.032 | 0.187 | 0.2078 | 0.0718 | 22 |
| 23 | 0.1028 | 0.0788 | 0.0818 | 0.820 | 0.360 | 0.442 | 0.064 | 0.222 | 0.026 | 0.164 | 0.1908 | 0.0688 | 23 |
| 24 | 0.1088 | 0.0768 | 0.0978 | 1.18 | 0.355 | 0.348 | 0.048 | 0.182 | 0.038 | 0.173 | 0.1858 | 0.0758 | 24 |
| 25 | 0.1078 | 0.0758 | 0.1158 | 1.17 | 0.377 | 0.288 | 0.044 | 0.202 | 0.038 | 0.182 | 0.1788 | 0.0848 | 25 |
| 26 | 0.1118 | 0.0728 | 0.3188 | 1.08 | 0.343 | 0.213 | 0.047 | 0.216 | 0.030 | 0.223 | 0.1778 | 0.0828 | 26 |
| 27 | 0.1188 | 0.0738 | 0.5338 | 1.15 | 0.338 | 0.185 | 0.041 | 0.186 | 0.028 | 0.231 | 0.1648 | 0.0828 | 27 |
| 28 | 0.1188 | 0.0698 | 0.4588 | 1.08 | 0.439 | 0.158 | 0.040 | 0.162 | 0.082 | 0.230 | 0.1338 | 0.0848 | 28 |
| 29 | 0.1238 | | 0.4358 | 0.888 | 0.808 | 0.228 | 0.037 | 0.236 | 0.082 | 0.220 | 0.1618 | 0.0888 | 29 |
| 30 | 0.1258 | | 0.4448 | 0.908 | 0.838 | 0.208 | 0.038 | 0.278 | 0.114 | 0.173 | 0.1848 | 0.0928 | 30 |
| 31 | 0.1298 | | 0.4338 | | 0.682 | | 0.040 | 0.215 | | 0.211 | | 0.0888 | 31 |
| TOTAL | 3.446 | 2.839 | 4.510 | 31.217 | 13.938 | 14.907 | 4.582 | 4.375 | 2.884 | 5.449 | 5.192 | 4.341 | TOTAL |
| MEAN | 0.111 | 0.094 | 0.145 | 1.04 | 0.450 | 0.497 | 0.148 | 0.141 | 0.089 | 0.178 | 0.173 | 0.137 | MEAN |
| MAX | 0.145 | 0.138 | 0.533 | 1.84 | 0.619 | 1.61 | 0.477 | 0.300 | 0.216 | 0.308 | 0.273 | 0.253 | MAX |
| MIN | 0.088 | 0.069 | 0.068 | 0.580 | 0.300 | 0.158 | 0.037 | 0.018 | 0.028 | 0.044 | 0.118 | 0.088 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.267
MAXIMUM DAILY, 1.848 ON APR 5
MINIMUM DAILY, 0.018 ON AUG 11
MAXIMUM INSTANTANEOUS,
2.128 AT 17:52 CST ON APR 4

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 11 15 N
LONG 99 05 10 W
DRAINAGE AREA, 1 850 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

REGULATED SINCE 1960

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 298 | JUL | 396 |
| FEB | 238 | AUG | 376 |
| MAR | 388 | SEP | 266 |
| APR | 2 700 | OCT | 471 |
| MAY | 1 200 | NOV | 449 |
| JUN | 1 290 | DEC | 366 |

TOTAL DISCHARGE, 8 430 dam³

## WHITESHELL RIVER AT OUTLET OF JESSICA LAKE - STATION NO. 05PC001

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.686 | 0.686E | 0.703 | 0.785 | 12.1 | 11.0 | 10.2 | 8.49 | 3.84 | 2.88 | 2.51 | 2.08 | 1 |
| 2 | 0.603 | 0.689E | 0.705 | 0.778 | 12.3 | 10.6 | 14.8 | 8.28 | 3.86 | 2.85 | 2.50 | 2.04 | 2 |
| 3 | 0.621 | 0.703E | 0.703 | 0.787 | 12.3 | 9.86 | 13.7 | 8.53 | 4.14 | 2.86 | 2.47 | 2.02 | 3 |
| 4 | 0.633 | 0.705E | 0.700 | 1.80 | 12.8 | 9.41 | 13.5 | 8.23 | 4.13 | 2.86 | 2.47 | 2.00 | 4 |
| 5 | 0.666 | 0.703E | 0.686 | 2.61 | 12.8 | 9.05 | 14.0 | 7.80 | 4.12 | 2.80 | 2.46 | 1.97 | 5 |
| 6 | 0.667 | 0.695E | 0.691 | 2.46 | 13.3 | 8.80 | 13.6 | 7.25 | 4.16 | 2.82 | 2.45 | 1.96 | 6 |
| 7 | 0.615 | 0.705A | 0.690 | 2.37 | 13.4 | 10.0 | 13.5 | 7.03 | 4.16 | 2.84 | 2.46 | 1.95 | 7 |
| 8 | 0.640 | 0.701 | 0.687 | 2.39 | 13.8 | 9.80 | 13.3 | 6.89 | 4.08 | 2.82 | 2.49 | 1.94 | 8 |
| 9 | 0.643 | 0.703 | 0.686 | 2.22 | 13.1 | 9.41 | 13.0 | 6.74 | 4.04 | 2.82 | 2.48 | 2.00 | 9 |
| 10 | 0.641 | 0.697 | 0.696 | 2.54 | 13.3 | 9.03 | 12.6 | 6.56 | 4.04 | 2.83 | 2.48 | 2.00 | 10 |
| 11 | 0.631 | 0.692 | 0.688 | 2.65 | 13.3 | 8.68 | 12.4 | 6.26 | 4.08 | 2.73 | 2.38 | 1.98 | 11 |
| 12 | 0.626 | 0.691 | 0.686 | 2.76 | 13.0 | 9.62 | 12.1 | 6.01 | 4.20 | 2.85 | 2.39 | 1.97 | 12 |
| 13 | 0.624 | 0.688 | 0.686 | 2.70 | 12.8 | 10.1 | 13.0 | 5.74 | 4.23 | 2.81 | 2.40 | 1.98 | 13 |
| 14 | 0.624 | 0.700 | 0.695 | 2.68 | 12.8 | 9.84 | 12.6 | 5.58 | 4.12 | 2.81 | 2.39 | 1.96 | 14 |
| 15 | 0.636 | 0.702 | 0.699 | 2.69 | 12.4 | 10.0 | 12.3 | 5.80 | 4.11 | 2.71 | 2.40 | 1.92 | 15 |
| 16 | 0.631 | 0.700 | 0.706 | 2.72 | 12.3 | 10.2 | 11.7 | 5.61 | 3.95 | 3.04 | 2.36 | 1.92 | 16 |
| 17 | 0.636 | 0.702 | 0.703 | 2.68 | 12.2 | 10.1 | 11.5 | 5.43 | 4.04 | 3.26 | 2.36 | 1.92 | 17 |
| 18 | 0.647 | 0.701 | 0.707 | 2.87 | 13.5 | 10.0 | 11.5 | 5.49 | 3.94 | 3.13 | 2.39 | 1.90 | 18 |
| 19 | 0.657A | 0.698 | 0.708 | 2.88 | 14.2 | 10.1 | 11.1 | 5.95 | 3.77 | 3.07 | 2.38 | 1.90 | 19 |
| 20 | 0.663E | 0.695 | 0.708 | 2.74 | 13.8 | 10.3 | 10.8 | 5.18 | 3.78 | 2.91 | 2.34 | 1.89 | 20 |
| 21 | 0.668E | 0.692 | 0.712 | 2.83 | 12.8 | 11.0 | 10.6 | 5.37 | 3.73 | 2.90 | 2.32 | 1.85 | 21 |
| 22 | 0.675E | 0.688 | 0.707 | 3.00 | 12.3 | 11.5 | 10.2 | 5.31 | 3.40 | 2.84 | 2.32 | 1.84 | 22 |
| 23 | 0.681E | 0.685 | 0.701 | 3.38 | 12.0 | 11.8 | 9.83 | 5.46 | 3.50 | 2.79 | 2.31 | 1.83 | 23 |
| 24 | 0.681E | 0.686 | 0.701 | 3.77 | 11.8 | 11.5 | 9.62 | 5.63 | 3.47 | 2.78 | 2.30 | 1.81 | 24 |
| 25 | 0.683E | 0.689 | 0.698 | 4.33 | 12.7 | 11.8 | 9.19 | 5.66 | 3.21 | 2.74 | 2.17 | 1.81 | 25 |
| 26 | 0.683E | 0.699 | 0.702 | 4.82 | 13.4 | 15.0 | 8.82 | 5.81 | 3.25 | 2.74 | 2.18 | 1.81 | 26 |
| 27 | 0.686E | 0.701 | 0.705 | 5.05 | 13.3 | 17.7 | 8.09 | 3.77 | 3.25 | 2.85 | 2.18 | 1.79 | 27 |
| 28 | 0.698E | 0.700 | 0.723 | 11.1 | 12.1 | 16.8 | 7.93 | 3.88 | 3.03 | 2.86 | 2.13 | 1.80 | 28 |
| 29 | 0.697E | | 0.736 | 11.5 | 11.5 | 15.1 | 8.03 | 3.84 | 3.03 | 2.84 | 2.08 | 1.81 | 29 |
| 30 | 0.698E | | 0.767 | 11.8 | 11.7 | 15.4 | 8.81 | 3.82 | 3.02 | 2.85 | 2.08 | 1.77 | 30 |
| 31 | 0.701E | | 0.783 | | 11.5 | | 8.75 | 3.86 | | 2.83 | | 1.77 | 31 |
| TOTAL | 19.707 | 18.631 | 21.888 | 111.180 | 382.1 | 334.89 | 388.83 | 187.30 | 113.89 | 87.10 | 68.89 | 58.16 | TOTAL |
| MEAN | 0.636 | 0.687 | 0.706 | 3.71 | 12.8 | 11.2 | 11.5 | 5.07 | 3.80 | 2.81 | 2.33 | 1.81 | MEAN |
| MAX | 0.701 | 0.706 | 0.767 | 11.8 | 14.2 | 17.7 | 15.2 | 6.63 | 4.23 | 3.26 | 2.51 | 2.06 | MAX |
| MIN | 0.486 | 0.685 | 0.686 | 0.785 | 11.5 | 8.68 | 7.93 | 3.43 | 3.02 | 2.63 | 2.08 | 1.77 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 4.78
MAXIMUM DAILY, 17.7 ON JUN 27
MINIMUM DAILY, 0.486 ON JAN 1
MAXIMUM INSTANTANEOUS,
18.9 AT 16:40 CST ON JUN 26

SUMMARY FOR THE YEAR 1989

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 02 20 N
LONG 95 30 20 W
DRAINAGE AREA, 884 km²
A - MANUAL GAUGE

E - ESTIMATED
REGULATED

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 1 700 | JUL | 30 000 |
| FEB | 1 600 | AUG | 13 000 |
| MAR | 1 880 | SEP | 9 650 |
| APR | 9 610 | OCT | 7 530 |
| MAY | 33 000 | NOV | 6 060 |
| JUN | 28 800 | DEC | 5 110 |

TOTAL DISCHARGE, 151 000 dam³

## WHITEWATER LAKE NEAR BOISSEVAIN - STATION NO. 05MD023

### DAILY WATER LEVEL IN METRES FOR 1969

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | DRY | 495.384E | --- | 495.374 | DRY | DRY | DRY | DRY | --- | --- | 1 |
| 2 | --- | --- | DRY | 495.400E | --- | 495.374 | DRY | DRY | DRY | DRY | --- | --- | 2 |
| 3 | --- | --- | DRY | 495.417A | --- | 495.374 | DRY | DRY | DRY | DRY | --- | --- | 3 |
| 4 | --- | --- | DRY | 495.402 | --- | 495.373 | DRY | DRY | DRY | DRY | --- | --- | 4 |
| 5 | --- | --- | DRY | 495.411 | --- | 495.371 | DRY | DRY | DRY | DRY | --- | --- | 5 |
| 6 | --- | --- | DRY | 495.408 | --- | 495.370 | DRY | DRY | DRY | DRY | --- | --- | 6 |
| 7 | --- | --- | DRY | 495.415A | --- | 495.370 | DRY | DRY | DRY | DRY | --- | --- | 7 |
| 8 | --- | --- | DRY | 495.500A | --- | DRY | DRY | DRY | DRY | DRY | --- | --- | 8 |
| 9 | --- | --- | DRY | 495.500E | --- | DRY | DRY | DRY | DRY | DRY | --- | --- | 9 |
| 10 | --- | --- | DRY | 495.500E | --- | DRY | DRY | DRY | DRY | DRY | --- | --- | 10 |
| 11 | --- | --- | DRY | 495.500A | --- | DRY | DRY | DRY | DRY | DRY | --- | --- | 11 |
| 12 | --- | --- | DRY | 495.443 | --- | DRY | DRY | DRY | DRY | DRY | --- | --- | 12 |
| 13 | --- | --- | DRY | 495.512 | --- | DRY | DRY | DRY | DRY | DRY | --- | --- | 13 |
| 14 | --- | --- | DRY | 495.518 | --- | DRY | DRY | DRY | DRY | DRY | --- | --- | 14 |
| 15 | --- | --- | DRY | 495.470 | --- | DRY | DRY | DRY | DRY | DRY | --- | --- | 15 |
| 16 | --- | --- | DRY | 495.537A | 495.378A | DRY | DRY | DRY | DRY | DRY | --- | --- | 16 |
| 17 | --- | --- | DRY | --- | 495.383 | DRY | DRY | DRY | DRY | DRY | --- | --- | 17 |
| 18 | --- | --- | DRY | --- | 495.382 | DRY | DRY | DRY | DRY | DRY | --- | --- | 18 |
| 19 | --- | --- | DRY | --- | 495.385 | DRY | DRY | DRY | DRY | DRY | --- | --- | 19 |
| 20 | --- | --- | DRY | --- | 495.383 | DRY | DRY | DRY | DRY | DRY | --- | --- | 20 |
| 21 | --- | --- | DRY | --- | 495.386 | DRY | DRY | DRY | DRY | DRY | --- | --- | 21 |
| 22 | --- | --- | DRY | --- | 495.383 | DRY | DRY | DRY | DRY | DRY | --- | --- | 22 |
| 23 | --- | --- | DRY | --- | 495.381 | DRY | DRY | DRY | DRY | DRY | --- | --- | 23 |
| 24 | --- | --- | DRY | --- | 495.380 | DRY | DRY | DRY | DRY | DRY | --- | --- | 24 |
| 25 | --- | --- | DRY | --- | 495.381 | DRY | DRY | DRY | DRY | DRY | --- | --- | 25 |
| 26 | --- | --- | DRY | --- | 495.381 | DRY | DRY | DRY | DRY | DRY | --- | --- | 26 |
| 27 | --- | --- | DRY | --- | 495.380 | DRY | DRY | DRY | DRY | DRY | --- | --- | 27 |
| 28 | --- | --- | DRY | --- | 495.378 | DRY | DRY | DRY | DRY | DRY | --- | --- | 28 |
| 29 | --- | | DRY | --- | 495.377 | DRY | DRY | DRY | DRY | DRY | --- | --- | 29 |
| 30 | --- | | 495.370E | --- | 495.376 | DRY | DRY | DRY | DRY | DRY | --- | --- | 30 |
| 31 | --- | | 495.383E | | 495.378 | | DRY | DRY | | DRY | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | --- | --- | DRY | DRY | DRY | --- | --- | MEAN |
| MAX | --- | --- | 495.383 | --- | --- | 495.374 | DRY | DRY | DRY | DRY | --- | --- | MAX |
| MIN | --- | --- | DRY | --- | --- | DRY | DRY | DRY | DRY | DRY | --- | --- | MIN |

WATER LEVELS IN METRES

MAXIMUM DAILY, 495.500A ON APR 8
MINIMUM DAILY, DRY ON MAR 1

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

SUMMARY FOR THE YEAR 1969

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 15 20 N
LONG 100 15 20 W

A - MANUAL GAUGE
E - ESTIMATED

DRAINAGE AREA, 728 km²

## WILD GOOSE CREEK NEAR DEAD CREEK NORTH OF PINAWA - STATION NO. 05PF008

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1969

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | 0.002 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2 | 0 | 0 | 0 | 0 | 0.002 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 3 | 0 | 0 | 0 | 0 | 0.002 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 4 | 0 | 0 | 0 | 0 | 0.002 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 5 | 0 | 0 | 0 | 0 A | 0.002 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 6 | 0 | 0 | 0 | 0 E | 0.001 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 7 | 0 | 0 | 0 | 0.001E | 0.001 | 0.008 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 8 | 0 | 0 | 0 | 0.001E | 0.001 | 0.005 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 9 | 0 | 0 | 0 | 0.001E | 0.001 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 10 | 0 | 0 | 0 | 0.002E | 0.001 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 11 | 0 | 0 | 0 | 0.003E | 0.001 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 12 | 0 | 0 | 0 | 0.003E | 0.001 | 0.010 | 0.001 | 0 | 0 | 0 | 0 | 0 | 12 |
| 13 | 0 | 0 | 0 | 0.004A | 0.001 | 0.017 | 0.003 | 0 | 0 | 0 | 0 | 0 | 13 |
| 14 | 0 | 0 | 0 | 0.007 | 0 | 0.008 | 0.001 | 0 | 0 | 0 | 0 | 0 | 14 |
| 15 | 0 | 0 | 0 | 0.014 | 0 | 0.004 | 0.001 | 0 | 0 | 0 | 0 | 0 | 15 |
| 16 | 0 | 0 | 0 | 0.018 | 0 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 17 | 0 | 0 | 0 | 0.008 | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 18 | 0 | 0 | 0 | 0.005 | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 19 | 0 | 0 | 0 | 0.003 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 20 | 0 | 0 | 0 | 0.010 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| 21 | 0 | 0 | 0 | 0.017 | 0.001 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| 22 | 0 | 0 | 0 | 0.025 | 0 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| 23 | 0 | 0 | 0 | 0.013 | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| 24 | 0 | 0 | 0 | 0.011 | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 25 | 0 | 0 | 0 | 0.010 | 0.011 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 |
| 26 | 0 | 0 | 0 | 0.008 | 0.011 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| 27 | 0 | 0 | 0 | 0.005 | 0.008 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 |
| 28 | 0 | 0 | 0 | 0.004 | 0.004 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| 29 | 0 | | 0 | 0.003 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| 30 | 0 | | 0 | 0.003 | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 |
| 31 | 0 | | 0 | | 0.001 | | 0 | 0 | | 0 | | 0 | 31 |
| TOTAL | 0 | 0 | 0 | 0.187 | 0.089 | 0.078 | 0.006 | 0 | 0 | 0 | 0 | 0 | TOTAL |
| MEAN | 0 | 0 | 0 | 0.006 | 0.003 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | MEAN |
| MAX | 0 | 0 | 0 | 0.025 | 0.011 | 0.017 | 0.003 | 0 | 0 | 0 | 0 | 0 | MAX |
| MIN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.001
MAXIMUM DAILY, 0.025 ON APR 22
MINIMUM DAILY, 0 ON JAN 1

DATA CONTRIBUTED BY -
ATOMIC ENERGY OF CANADA

SUMMARY FOR THE YEAR 1969

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 15 00 N
LONG 95 53 54 W
DRAINAGE AREA, 0.43 km²
A - MANUAL GAUGE

E - ESTIMATED
NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 0 | JUL | 0.53 |
| FEB | 0 | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 16.2 | OCT | 0 |
| MAY | 8.10 | NOV | 0 |
| JUN | 6.74 | DEC | 0 |

TOTAL DISCHARGE, 29.6 dam³

## WILLOW CREEK NEAR CHATER - STATION NO. 05MH011

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | B 0.010 | 0 | 0 | 0 | 0 | 0 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0.3338 B | 0.009 | 0 | 0 | 0 | 0 | 0 | --- | --- | 2 |
| 3 | --- | --- | 0B | 2.33 B | 0.007 | 0 | 0 | 0 | 0 | 0 | --- | --- | 3 |
| 4 | --- | --- | 0B | 3.81 B | 0.005 | 0 | 0 | 0 | 0 | 0 | --- | --- | 4 |
| 5 | --- | --- | 0B | 3.48 B | 0.004 | 0 | 0 | 0 | 0 | 0 | --- | --- | 5 |
| 6 | --- | --- | 0B | 1.75 B | B 004 | 0 | 0 | 0 | 0 | 0 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.7448 | B 003 | 0 | 0 | 0 | 0 | 0 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.5428 | B 002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.2788 | B 002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.1808 | B 002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.1658 | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.148 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.184 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.257 | B 001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.236 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.215 | 0.001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.176 | B 002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.114 | B 002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.088 | B 002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.074 | B 002 | 0 | 0 | 0 | 0 | 0 | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.088 | B 001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.087 | B 001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.051 | B 001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.066 | B 001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.073 | B 001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.057 | B 001 | 0 | 0 | 0 | 0 | 0 | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.048 | B | 0 | 0 | 0 | 0 | 0 | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.034 | B | 0 | 0 | 0 | 0 | 0 | --- | --- | 28 |
| 29 | --- | | 0B | 0.024 | B | 0 | 0 | 0 | 0 | 0 | --- | --- | 29 |
| 30 | --- | | 0B | 0.016 | B | 0 | 0 | 0 | | 0 | | --- | 30 |
| 31 | --- | | 0B | | B | | 0 | 0 | | 0 | | --- | 31 |
| TOTAL | --- | --- | 0 | 15.811 | 0.088 | 0 | 0 | 0 | 0 | 0 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.530 | 0.002 | 0 | 0 | 0 | 0 | 0 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 3.81 | 0.010 | 0 | 0 | 0 | 0 | 0 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.084
MAXIMUM DAILY, 3.810 ON APR 4
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
4.388 AT 16:32 CST ON APR 4

SUMMARY FOR THE MONTHS MAR TO OCT

TYPE OF GAUGE - RECORDING
LOCATION - LAT 49 51 32 N
LONG 98 49 34 W
DRAINAGE AREA, 606 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 0 |
| FEB | --- | AUG | 0 |
| MAR | 0 | SEP | 0 |
| APR | 1 380 | OCT | 0 |
| MAY | 5.88 | NOV | --- |
| JUN | B | DEC | --- |

TOTAL DISCHARGE, 1 380 dam³

## WILLOW CREEK NEAR GIMLI - STATION NO. 05BB002

DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 0 | 0.001 | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 0 | 0.001 | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 0 | 0.001 | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 0 | 0.001 | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | 0B | 0 B | 0 | 0.001 | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | 0B | 0 B | 0 | 0.001 | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | 0B | 0 B | 0 | 0.002 | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.0208 | 0 | 0.001 | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.0618 | 0 | 0.001 | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.0478 | 0 | 0.002 | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | 0B | 0.0748 | 0.001 | 0.005 | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | 0B | 0.0728 | 0.001 | 2.41 | --- | --- | --- | --- | --- | --- | 12 |
| 13 | --- | --- | 0B | 0.0868 | 0.001 | 5.36 | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | 0B | 0.2088 | 0.001 | 4.88 | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | 0B | 0.1808 | 0.001 | 3.83 | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | 0B | 0.2138 | 0.001 | 3.13 | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | 0B | 0.2188 | 0.001 | 2.46 | --- | --- | --- | --- | --- | --- | 17 |
| 18 | --- | --- | 0B | 0.2438 | 0.001 | 1.83 | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | 0B | 0.3018 | 0.001 | 1.67 | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | 0B | 0.188 | 0.001 | 1.30 | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | 0B | 0.284 | 0.001 | 1.08 | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | 0B | 0.300 | 0.001 | 0.853 | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | 0B | 0.238 | 0 | 0.659 | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | 0B | 0.061 | 0 | 0.474 | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | 0B | 0.036 | 0.002 | 0.306 | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | 0B | 0.034 | 0.001 | 0.208 | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | 0B | 0.031 | 0.002 | 0.327 | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | 0B | 0.024 | 0.003 | 0.240 | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | 0B | 0 | 0.003 | 0.178 | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | 0B | 0 | 0.001 | 0.138 | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | 0B | | 0.001 | | --- | --- | | --- | --- | --- | 31 |
| TOTAL | --- | --- | 0 | 2.888 | 0.024 | 34.382 | --- | --- | --- | --- | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 0.095 | 0.001 | 1.15 | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | 0 | 0.301 | 0.003 | 5.36 | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 0 | 0.001 | --- | --- | --- | --- | --- | --- | MIN |

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.355
MAXIMUM DAILY, 5.36 ON JUN 13
MINIMUM DAILY, 0B ON MAR 1
MAXIMUM INSTANTANEOUS,
10.2 AT 05:03 CST ON JUN 13

SUMMARY FOR THE MONTHS MAR TO JUN

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 34 50 N
LONG 97 03 40 W
DRAINAGE AREA, 263 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | --- |
| FEB | --- | AUG | --- |
| MAR | 0 | SEP | --- |
| APR | 349 | OCT | --- |
| MAY | 3.07 | NOV | --- |
| JUN | 2 870 | DEC | --- |

TOTAL DISCHARGE, 3 220 dam³

## WILSON CREEK NEAR MCCREARY - STATION NO. 05LJ001

### DAILY WATER LEVEL IN METRES FOR 1980

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 |
| 2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 2 |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 3 |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 4 |
| 5 | --- | --- | --- | --- | 387.638 | --- | --- | --- | --- | --- | --- | --- | 5 |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6 |
| 7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 7 |
| 8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8 |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9 |
| 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10 |
| 11 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11 |
| 12 | --- | --- | --- | --- | --- | 387.988 | --- | --- | 387.736 | --- | --- | --- | 12 |
| 13 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 13 |
| 14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 14 |
| 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 15 |
| 16 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 16 |
| 17 | --- | --- | --- | --- | 387.780 | --- | --- | --- | --- | 387.780 | --- | --- | 17 |
| 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 18 |
| 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 19 |
| 20 | --- | --- | --- | --- | 387.811 | --- | --- | --- | --- | --- | --- | --- | 20 |
| 21 | --- | --- | --- | 387.881 | --- | --- | --- | --- | --- | --- | --- | --- | 21 |
| 22 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 22 |
| 23 | --- | --- | --- | --- | --- | 387.857 | --- | --- | --- | --- | --- | --- | 23 |
| 24 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 24 |
| 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 25 |
| 26 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 26 |
| 27 | --- | --- | --- | 387.884 | --- | --- | --- | --- | --- | --- | --- | --- | 27 |
| 28 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 28 |
| 29 | --- | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 29 |
| 30 | --- | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 30 |
| 31 | --- | | --- | | --- | | --- | --- | | --- | | --- | 31 |
| MEAN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MEAN |
| MAX | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MAX |
| MIN | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | MIN |

### SUMMARY FOR THE YEAR 1980

TYPE OF GAUGE - MANUAL
LOCATION - LAT 50 43 46 N
LONG 99 33 16 W
DATA CONTRIBUTED BY -
MANITOBA WATER RESOURCES BRANCH

NATURAL FLOW

DRAINAGE AREA,
32.6 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM

## WILSON RIVER NEAR ASHVILLE - STATION NO. 05LJ045

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1980

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0 B | 0.0108 | 0.123 | 0.002 | 0.137 | 0.002 | 0.001 | 0.001 | --- | --- | 1 |
| 2 | --- | --- | 0 B | 0.0188 | 0.085 | 0.002 | 0.121 | 0.002 | 0.001 | 0.001 | --- | --- | 2 |
| 3 | --- | --- | 0 B | 0.0448 | 0.073 | 0.002 | 0.111 | 0.002 | 0.001 | 0.001 | --- | --- | 3 |
| 4 | --- | --- | 0 B | 0.7838 | 0.064 | 0.002 | 0.118 | 0.002 | 0.001 | 0.001 | --- | --- | 4 |
| 5 | --- | --- | 0 B | 3.24 B | 0.057 | 0.002 | 0.107 | 0.001 | 0.001 | 0.001 | --- | --- | 5 |
| 6 | --- | --- | 0 B | 3.46 B | 0.053 | 0.002 | 0.104 | 0.001 | 0.001 | 0.001 | --- | --- | 6 |
| 7 | --- | --- | 0 B | 2.16 | 0.038 | 0.002 | 0.094 | 0.001 | 0.001 | 0.001 | --- | --- | 7 |
| 8 | --- | --- | 0 B | 1.82 | 0.037 | 0.005 | 0.110 | 0.001 | 0.001 | 0.001 | --- | --- | 8 |
| 9 | --- | --- | 0 B | 1.36 | 0.036 | 0.014 | 0.110 | 0.001 | 0.001 | 0.001 | --- | --- | 9 |
| 10 | --- | --- | 0 B | 0.710 | 0.033 | 0.008 | 0.092 | 0.001 | 0.001 | 0.001 | --- | --- | 10 |
| 11 | --- | --- | 0 B | 0.565 | 0.035 | 0.139 | 0.074 | 0.001 | 0.001 | 0.001 | --- | --- | 11 |
| 12 | --- | --- | 0 B | 0.414 | 0.015 | 9.80 | 0.067 | 0.003 | 0.001 | 0.001 | --- | --- | 12 |
| 13 | --- | --- | 0 B | 0.307 | 0.015 | 9.87 | 0.061 | 0.002 | 0.001 | 0.001 | --- | --- | 13 |
| 14 | --- | --- | 0 B | 0.313 | 0.012 | 8.46 | 0.139 | 0.001 | 0.001 | 0.001 | --- | --- | 14 |
| 15 | --- | --- | 0 B | 1.72 | 0.010 | 4.37 | 0.113 | 0.001 | 0.001 | 0.001 | --- | --- | 15 |
| 16 | --- | --- | 0 B | 1.89 | 0.012 | 2.34 | 0.085 | 0.001 | 0.001 | 0.001 | --- | --- | 16 |
| 17 | --- | --- | 0 B | 1.47 | 0.010 | 1.38 | 0.068 | 0.001 | 0.001 | 0.001 | --- | --- | 17 |
| 18 | --- | --- | 0 B | 1.08 | 0.007 | 0.802 | 0.068 | 0.001 | 0.001 | 0.001 | --- | --- | 18 |
| 19 | --- | --- | 0 B | 0.848 | 0.004 | 0.657 | 0.061 | 0.001 | 0.001 | 0.001 | --- | --- | 19 |
| 20 | --- | --- | 0 B | 0.681 | 0.003 | 0.533 | 0.050 | 0.001 | 0.001 | 0.001 | --- | --- | 20 |
| 21 | --- | --- | 0 B | 0.372 | 0.003 | 0.430 | 0.043 | 0.001 | 0.001 | 0.001 | --- | --- | 21 |
| 22 | --- | --- | 0 B | 0.327 | 0.003 | 0.384 | 0.038 | 0.001 | 0.001 | 0.001 | --- | --- | 22 |
| 23 | --- | --- | 0 B | 0.335 | 0.003 | 0.302 | 0.036 | 0.001 | 0.001 | 0.001 | --- | --- | 23 |
| 24 | --- | --- | 0.0108 | 0.302 | 0.003 | 0.245 | 0.030 | 0.001 | 0.001 | 0.001 | --- | --- | 24 |
| 25 | --- | --- | 0.0388 | 0.407 | 0.008 | 0.207 | 0.016 | 0.001 | 0.001 | 0.001 | --- | --- | 25 |
| 26 | --- | --- | 0.0908 | 0.547 | 0.003 | 0.207 | 0.008 | 0.001 | 0.001 | 0.001 | --- | --- | 26 |
| 27 | --- | --- | 0.0388 | 0.350 | 0.003 | 0.178 | 0.005 | 0.001 | 0.001 | 0.0018 | --- | --- | 27 |
| 28 | --- | --- | 0.0188 | 0.264 | 0.003 | 0.172 | 0.003 | 0.001 | 0.001 | 0.0018 | --- | --- | 28 |
| 29 | --- | | 0.0108 | 0.188 | 0.003 | 0.171 | 0.003 | 0.001 | 0.001 | 0.0018 | --- | --- | 29 |
| 30 | --- | | 0.0078 | 0.149 | 0.003 | 0.188 | 0.003 | 0.001 | 0.001 | 0.0018 | --- | --- | 30 |
| 31 | --- | | 0.0068 | | 0.003 | | 0.003 | 0.001 | | 0.0018 | | --- | 31 |
| TOTAL | --- | --- | 0.171 | 24.184 | 0.784 | 38.201 | 3.018 | 0.039 | 0.030 | 0.031 | --- | --- | TOTAL |
| MEAN | --- | --- | 0.008 | 0.808 | 0.024 | 1.21 | 0.088 | 0.001 | 0.001 | 0.001 | --- | --- | MEAN |
| MAX | --- | --- | 0.088 | 3.46 | 0.123 | 9.87 | 0.137 | 0.003 | 0.001 | 0.001 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0.010 | 0.003 | 0.002 | 0.002 | 0.001 | 0.001 | 0.001 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 0.380
MAXIMUM DAILY, 9.87 ON JUN 13
MINIMUM DAILY, 00 ON MAR 1
MAXIMUM INSTANTANEOUS,
14.0 AT 18:00 CST ON JUN 13

TYPE OF GAUGE - RECORDING
LOCATION - LAT 51 00 30 N
LONG 100 30 00 W
DRAINAGE AREA, 900 km²

B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE
IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 174 |
| FEB | --- | AUG | 3.37 |
| MAR | 14.8 | SEP | 2.59 |
| APR | 2 090 | OCT | 2.66 |
| MAY | 68.1 | NOV | --- |
| JUN | 3 140 | DEC | --- |

TOTAL DISCHARGE, 5 490 dam³

## WINNIPEG RIVER AT LAC DU BONNET - STATION NO. 05PF002

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 284.831 | 284.811 | 284.871 | 284.853 | 284.933 | 284.944 | 284.903 | 284.892 | 284.840 | 284.848 | 284.787 | 284.918 | 1 |
| 2 | 284.831 | 284.811 | 284.832 | 284.883 | 284.883 | 284.904 | 284.883 | 284.872 | 284.760 | 284.828 | 284.796 | 284.888 | 2 |
| 3 | 284.841 | 284.801 | 284.832 | 284.883 | 284.851 | 284.944 | 284.913 | 284.902 | 284.760 | 284.889 | 284.886 | 284.918 | 3 |
| 4 | 284.861 | 284.781 | 284.832 | 284.883 | 284.903 | 284.914 | 284.963 | 284.892 | 284.750 | 284.840 | 284.748 | 284.884 | 4 |
| 5 | 284.861 | 284.741 | 284.842 | 284.843 | 284.973 | 284.914 | 284.983 | 284.892 | 284.780 | 284.829 | 284.868 | 284.827 | 5 |
| 6 | 284.861 | 284.781 | 284.842 | 284.913 | 284.983 | 284.914 | 285.023 | 284.872 | 284.850 | 284.788 | 284.908 | 284.936 | 6 |
| 7 | 284.871 | 284.781 | 284.832 | 284.903 | 284.943 | 284.954 | 284.883 | 284.832 | 284.880 | 284.809 | 284.918 | 284.908 | 7 |
| 8 | 284.931 | 284.821 | 284.862 | 284.903 | 284.933 | 284.954 | 284.913 | 284.842 | 284.850 | 284.889 | 284.938 | 284.888 | 8 |
| 9 | 284.911 | 284.841 | 284.842 | 284.873 | 284.923 | 284.944 | 284.863 | 284.801 | 284.840 | 284.889 | 284.908 | 284.918 | 9 |
| 10 | 284.871 | 284.851 | 284.932 | 284.843 | 284.943 | 284.954 | 284.973 | 284.801 | 284.880 | 284.788 | 284.788 | 284.918 | 10 |
| 11 | 284.931 | 284.851 | 284.842 | 284.813 | 284.843 | 284.954 | 284.983 | 284.811 | 284.820 | 284.729 | 284.778 | 284.918 | 11 |
| 12 | 284.941 | 284.871 | 284.832 | 284.763 | 284.903 | 284.954 | 285.033 | 284.871 | 284.840 | 284.788 | 284.878 | 284.848 | 12 |
| 13 | 284.931 | 284.882 | 284.832 | 284.743 | 284.903 | 284.988 | 284.943 | 284.881 | 284.840 | 284.838 | 284.888 | 284.838 | 13 |
| 14 | 284.931 | 284.932 | 284.822 | 284.713 | 284.903 | 284.954 | 284.903 | 284.841 | 284.880 | 284.809 | 284.858 | 284.868 | 14 |
| 15 | 284.941 | 284.952 | 284.822 | 284.803 | 284.903 | 284.994 | 284.983 | 284.891 | 284.900 | 284.809 | 284.938 | 284.898 | 15 |
| 16 | 284.981 | 284.983 | 284.892 | 284.873 | 284.943 | 284.996 | 284.983 | 284.881 | 284.810 | 284.838 | 284.888 | 284.938 | 16 |
| 17 | 284.981 | 284.943 | 284.872 | 284.883 | 284.943 | 284.934 | 284.943 | 284.851 | 284.850 | 284.889 | 284.868 | 284.888 | 17 |
| 18 | 284.951 | 284.932 | 284.852 | 284.843 | 284.903 | 284.904 | 284.943 | 284.811 | 284.840 | 284.878 | 284.828 | 284.948 | 18 |
| 19 | 284.984 | 284.982 | 284.852 | 284.823 | 284.883 | 284.884 | 284.932 | 284.831 | 284.830 | 284.748 | 284.808 | 284.888 | 19 |
| 20 | 284.931 | 284.982 | 284.842 | 284.813 | 284.804 | 284.894 | 284.922 | 284.851 | 284.830 | 284.729 | 284.888 | 284.898 | 20 |
| 21 | 284.911 | 284.882 | 284.822 | 284.813 | 284.804 | 284.954 | 284.912 | 284.851 | 284.830 | 284.788 | 284.828 | 284.877 | 21 |
| 22 | 284.931 | 284.882 | 284.832 | 284.803 | 284.814 | 284.934 | 284.902 | 284.901 | 284.820 | 284.869 | 284.828 | 284.877 | 22 |
| 23 | 284.901 | 284.872 | 284.832 | 284.813 | 284.804 | 284.894 | 284.902 | 284.881 | 284.819 | 284.878 | 284.878 | 284.877 | 23 |
| 24 | 284.881 | 284.882 | 284.812 | 284.833 | 284.834 | 284.884 | 284.911 | 284.841 | 284.859 | 284.939 | 284.828 | 284.927 | 24 |
| 25 | 284.941 | 284.892 | 284.852 | 284.783 | 284.934 | 284.883 | 284.921 | 284.861 | 284.889 | 284.909 | 284.828 | 284.887 | 25 |
| 26 | 284.891 | 284.882 | 284.852 | 284.800 | 284.974 | 284.973 | 284.922 | 284.851 | 284.819 | 284.869 | 284.848 | 284.887 | 26 |
| 27 | 284.881 | 284.882 | 284.872 | 284.843 | 284.944 | 284.943 | 284.912 | 284.851 | 284.789 | 284.778 | 284.888 | 284.917 | 27 |
| 28 | 284.861 | 284.962 | 284.872 | 284.813 | 284.884 | 284.903 | 284.922 | 284.811 | 284.789 | 284.808 | 284.868 | 284.947 | 28 |
| 29 | 284.831 | | 284.872 | 284.813 | 284.974 | 284.953 | 284.922 | 284.841 | 284.809 | 284.878 | 284.788 | 284.917 | 29 |
| 30 | 284.831 | | 284.922 | 284.843 | 284.883 | 284.932 | 284.932 | 284.885 | 284.829 | 284.938 | 284.848 | 284.897 | 30 |
| 31 | 284.811 | | 284.932 | 284.974 | | 284.952 | 284.871 | | | 284.878 | | 284.897 | 31 |
| MEAN | 284.918 | 284.884 | 284.900 | 284.808 | 284.929 | 284.941 | 284.936 | 284.887 | 284.835 | 284.863 | 284.858 | 284.903 | MEAN |
| MAX | 284.981 | 284.983 | 284.971 | 284.913 | 284.994 | 284.996 | 285.033 | 284.951 | 284.950 | 285.009 | 284.868 | 284.948 | MAX |
| MIN | 284.811 | 284.741 | 284.812 | 284.803 | 284.851 | 284.894 | 284.883 | 284.801 | 284.760 | 284.729 | 284.698 | 284.828 | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MEAN, 284.898
MAXIMUM DAILY, 285.033 ON JUL 12
MINIMUM DAILY, 284.803 ON APR 22

TYPE OF GAUGE - MANUAL
LOCATION - LAT 50 15 35 N
LONG 95 03 20 W

REGULATED

DRAINAGE AREA, 132 000 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1983 ADJ.)

## WINNIPEG RIVER AT MCARTHUR GENERATING STATION - STATION NO. 05PP008

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 863 | 932 | 966 | 933 | 1 110 | 1 140 | 1 430 | 1 980 | 848 | 831 | 618 | 861 | 1 |
| 2 | 863 | 930 | 953 | 946 | 1 080 | 1 110 | 1 420 | 1 880 | 776 | 871 | 812 | 814 | 2 |
| 3 | 873 | 940 | 945 | 952 | 894 | 1 080 | 1 410 | 1 840 | 776 | 885 | 872 | 818 | 3 |
| 4 | 888 | 942 | 954 | 952 | 948 | 1 080 | 1 480 | 1 830 | 858 | 885 | 288 | 815 | 4 |
| 5 | 833 | 913 | 947 | 947 | 942 | 1 040 | 1 880 | 1 470 | 739 | 887 | 388 | 748 | 5 |
| 6 | 897 | 998 | 947 | 947 | 978 | 1 050 | 1 780 | 1 430 | 735 | 881 | 823 | 882 | 6 |
| 7 | 930 | 886 | 963 | 916 | 1 040 | 1 080 | 1 740 | 1 320 | 703 | 868 | 474 | 842 | 7 |
| 8 | 881 | 893 | 933 | 948 | 981 | 1 080 | 1 880 | 1 280 | 743 | 817 | 813 | 822 | 8 |
| 9 | 936 | 907 | 948 | 948 | 894 | 1 080 | 1 720 | 1 140 | 802 | 718 | 885 | 705 | 9 |
| 10 | 887 | 932 | 980 | 937 | 981 | 1 080 | 1 780 | 975 | 806 | 707 | 871 | 868 | 10 |
| 11 | 883 | 931 | 948 | 948 | 1 080 | 1 080 | 1 780 | 1 080 | 732 | 898 | 418 | 718 | 11 |
| 12 | 891 | 930 | 943 | 981 | 1 080 | 1 170 | 1 880 | 1 010 | 693 | 825 | 384 | 884 | 12 |
| 13 | 930 | 838 | 947 | 954 | 1 040 | 1 220 | 1 810 | 839 | 700 | 807 | 847 | 830 | 13 |
| 14 | 882 | 943 | 942 | 948 | 1 030 | 1 230 | 1 720 | 881 | 721 | 808 | 828 | 828 | 14 |
| 15 | 888 | 948 | 936 | 981 | 978 | 1 270 | 1 710 | 888 | 738 | 827 | 870 | 888 | 15 |
| 16 | 943 | 948 | 939 | 981 | 938 | 1 280 | 1 880 | 883 | 778 | 781 | 828 | 784 | 16 |
| 17 | 888 | 940 | 933 | 948 | 1 040 | 1 400 | 1 820 | 872 | 880 | 707 | 840 | 818 | 17 |
| 18 | 880 | 934 | 938 | 982 | 1 010 | 1 310 | 1 820 | 888 | 748 | 888 | 848 | 732 | 18 |
| 19 | 850 | 883 | 927 | 987 | 848 | 1 230 | 1 780 | 705 | 778 | 804 | 488 | 772 | 19 |
| 20 | 948 | 981 | 934 | 947 | 888 | 1 130 | 1 780 | 773 | 877 | 818 | 488 | 728 | 20 |
| 21 | 908 | 881 | 927 | 940 | 883 | 1 180 | 1 780 | 885 | 733 | 884 | 808 | 788 | 21 |
| 22 | 928 | 881 | 934 | 948 | 948 | 1 180 | 1 740 | 878 | 708 | 872 | 818 | 808 | 22 |
| 23 | 948 | 881 | 903 | 948 | 948 | 1 180 | 1 770 | 882 | 829 | 830 | 878 | 712 | 23 |
| 24 | 880 | 888 | 894 | 872 | 948 | 1 180 | 1 780 | 873 | 843 | 835 | 812 | 717 | 24 |
| 25 | 923 | 884 | 908 | 871 | 1 030 | 1 230 | 1 780 | 889 | 782 | 887 | 871 | 788 | 25 |
| 26 | 942 | 881 | 814 | 808 | 1 080 | 1 300 | 1 780 | 888 | 881 | 886 | 328 | 838 | 26 |
| 27 | 903 | 882 | 933 | 883 | 1 080 | 1 280 | 1 740 | 848 | 888 | 889 | 842 | 878 | 27 |
| 28 | 938 | 888 | 878 | 1 010 | 1 080 | 1 220 | 1 730 | 881 | 852 | 443 | 848 | 818 | 28 |
| 29 | 933 | | 908 | 1 120 | 1 080 | 1 230 | 1 730 | 714 | 808 | 841 | 842 | 828 | 29 |
| 30 | 930 | | 888 | 1 120 | 1 140 | 1 400 | 1 740 | 808 | 420 | 862 | 483 | 788 | 30 |
| 31 | 889 | | 938 | | 1 180 | | 1 730 | 874 | | 882 | | 888 | 31 |
| TOTAL | 26 111 | 26 332 | 26 777 | 28 831 | 31 437 | 35 880 | 53 310 | 33 231 | 21 388 | 19 337 | 15 188 | 21 378 | TO |
| MEAN | 807 | 837 | 928 | 884 | 1 010 | 1 180 | 1 720 | 1 040 | 712 | 824 | 840 | 888 | ME |
| MAX | 888 | 882 | 888 | 1 120 | 1 180 | 1 400 | 1 810 | 1 880 | 888 | 781 | 871 | 888 | MA |
| MIN | 833 | 888 | 814 | 871 | 938 | 1 040 | 1 410 | 708 | 420 | 443 | 288 | 818 | MI |

### SUMMARY FOR THE YEAR 1989

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 936
MAXIMUM DAILY, 1 810 ON JUL 13
MINIMUM DAILY, 388 ON NOV 4

TYPE OF GAUGE - POWER PLANT
LOCATION - LAT 50 33 53 N
LONG 95 59 50 W

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 2 430 000 | JUL | 4 600 000 |
| FEB | 2 270 000 | AUG | 2 780 000 |
| MAR | 2 480 000 | SEP | 1 880 000 |
| APR | 2 470 000 | OCT | 1 870 000 |
| MAY | 2 730 000 | NOV | 1 400 000 |
| JUN | 3 070 000 | DEC | 1 880 000 |

TOTAL DISCHARGE, 28 800 000 dam³

DATA CONTRIBUTED BY - MANITOBA HYDRO

REGULATED SINCE 1954

REMARKS - FLOW CALCULATED FROM GENERATION AND SPILL TABLES

## WINNIPEG RIVER AT PINE FALLS GENERATING STATION - STATION NO. 05PF008

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 840 | 913 | 1 020 | 926 | 1 180 | 1 220 | 1 510 | 1 770 | 884 | 815 | 828 | 837 | 1 |
| 2 | 858 | 937 | 983 | 943 | 1 180 | 1 210 | 1 500 | 1 610 | 778 | 717 | 837 | 835 | 2 |
| 3 | 886 | 917 | 971 | 957 | 1 080 | 1 180 | 1 510 | 1 580 | 781 | 687 | 578 | 575 | 3 |
| 4 | 858 | 926 | 957 | 948 | 991 | 1 160 | 1 520 | 1 580 | 829 | 678 | 307 | 548 | 4 |
| 5 | 844 | 902 | 960 | 978 | 1 010 | 1 110 | 1 640 | 1 520 | 781 | 711 | 369 | 767 | 5 |
| 6 | 885 | 885 | 973 | 979 | 1 080 | 1 180 | 1 630 | 1 480 | 720 | 663 | 612 | 888 | 6 |
| 7 | 913 | 884 | 945 | 921 | 1 130 | 1 170 | 1 920 | 1 330 | 719 | 800 | 498 | 853 | 7 |
| 8 | 898 | 884 | 955 | 980 | 1 080 | 1 180 | 1 710 | 1 240 | 715 | 808 | 822 | 828 | 8 |
| 9 | 842 | 914 | 992 | 983 | 1 040 | 1 170 | 1 780 | 1 280 | 826 | 722 | 884 | 725 | 9 |
| 10 | 889 | 914 | 942 | 958 | 1 050 | 1 170 | 1 740 | 1 070 | 812 | 726 | 865 | 832 | 10 |
| 11 | 887 | 926 | 984 | 973 | 1 130 | 1 140 | 1 780 | 1 130 | 784 | 803 | 663 | 638 | 11 |
| 12 | 886 | 887 | 985 | 951 | 1 140 | 1 240 | 1 620 | 1 140 | 718 | 849 | 338 | 871 | 12 |
| 13 | 923 | 908 | 950 | 948 | 1 100 | 1 290 | 1 950 | 1 000 | 728 | 853 | 846 | 828 | 13 |
| 14 | 887 | 921 | 952 | 974 | 1 080 | 1 300 | 1 760 | 930 | 723 | 807 | 857 | 852 | 14 |
| 15 | 888 | 938 | 921 | 980 | 1 050 | 1 330 | 1 720 | 885 | 728 | 880 | 881 | 823 | 15 |
| 16 | 906 | 884 | 924 | 1 000 | 1 030 | 1 420 | 1 880 | 888 | 784 | 835 | 884 | 735 | 16 |
| 17 | 927 | 933 | 931 | 1 010 | 1 120 | 1 450 | 1 850 | 870 | 748 | 708 | 885 | 887 | 17 |
| 18 | 973 | 918 | 918 | 957 | 1 080 | 1 350 | 1 850 | 873 | 781 | 719 | 843 | 733 | 18 |
| 19 | 911 | 1 000 | 920 | 981 | 1 020 | 1 300 | 1 840 | 788 | 738 | 892 | 820 | 787 | 19 |
| 20 | 912 | 981 | 915 | 957 | 1 010 | 1 180 | 1 840 | 785 | 722 | 808 | 477 | 704 | 20 |
| 21 | 920 | 887 | 918 | 978 | 1 030 | 1 200 | 1 870 | 885 | 884 | 488 | 515 | 785 | 21 |
| 22 | 911 | 928 | 920 | 982 | 987 | 1 280 | 1 440 | 888 | 734 | 486 | 821 | 742 | 22 |
| 23 | 941 | 943 | 918 | 1 010 | 987 | 1 340 | 1 840 | 888 | 582 | 584 | 888 | 785 | 23 |
| 24 | 883 | 981 | 886 | 937 | 988 | 1 180 | 1 840 | 875 | 621 | 848 | 821 | 702 | 24 |
| 25 | 908 | 870 | 885 | 888 | 1 070 | 1 300 | 1 850 | 870 | 740 | 845 | 885 | 728 | 25 |
| 26 | 906 | 1 010 | 888 | 928 | 1 210 | 1 380 | 1 840 | 888 | 718 | 847 | 361 | 882 | 26 |
| 27 | 883 | 887 | 885 | 1 020 | 1 180 | 1 380 | 1 820 | 881 | 718 | 878 | 831 | 840 | 27 |
| 28 | 850 | 888 | 888 | 1 110 | 1 150 | 1 310 | 1 780 | 867 | 674 | 867 | 878 | 780 | 28 |
| 29 | 931 | | 885 | 1 220 | 1 180 | 1 280 | 1 800 | 783 | 628 | 838 | 878 | 831 | 29 |
| 30 | 912 | | 911 | 1 180 | 1 210 | 1 480 | 1 810 | 778 | 397 | 835 | 443 | 778 | 30 |
| 31 | 883 | | 918 | | 1 230 | | 1 830 | 882 | | 883 | | 708 | 31 |
| TOTAL | 27 831 | 28 117 | 28 887 | 29 872 | 33 881 | 37 770 | 55 130 | 33 078 | 21 008 | 18 818 | 18 805 | 21 285 | TOTAL |
| MEAN | 898 | 933 | 932 | 985 | 1 080 | 1 280 | 1 780 | 1 070 | 720 | 830 | 880 | 887 | MEAN |
| MAX | 973 | 1 010 | 1 020 | 1 220 | 1 230 | 1 480 | 1 890 | 1 770 | 884 | 835 | 891 | 831 | MAX |
| MIN | 840 | 884 | 885 | 888 | 988 | 1 110 | 1 800 | 783 | 397 | 458 | 307 | 537 | MIN |

### SUMMARY FOR THE YEAR 1989

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 883
MAXIMUM DAILY, 1 990 ON JUL 13
MINIMUM DAILY, 307 ON NOV 4

TYPE OF GAUGE - POWER PLANT
LOCATION - LAT 50 34 03 N
LONG 96 10 39 W

REGULATED SINCE 1951

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 2 400 000 | JUL | 4 780 000 |
| FEB | 2 280 000 | AUG | 2 880 000 |
| MAR | 2 500 000 | SEP | 1 870 000 |
| APR | 2 560 000 | OCT | 1 800 000 |
| MAY | 2 810 000 | NOV | 1 430 000 |
| JUN | 3 280 000 | DEC | 1 840 000 |

TOTAL DISCHARGE, 30 300 000 dam³

DATA CONTRIBUTED BY -
MANITOBA HYDRO

REMARKS - FLOW CALCULATED FROM PLANT GENERATION AND FROM SPILL TABLES

## WINNIPEG RIVER AT SLAVE FALLS - STATION NO. 05PF003

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 892 | 941 | 982 | 988 | 974 | 1 080 | 1 840 | 1 730 | 823 | 800 | 862 | 885 | 1 |
| 2 | 910 | 942 | 973 | 982 | 948 | 1 080 | 1 880 | 1 780 | 835 | 817 | 886 | 3 |
| 3 | 907 | 934 | 974 | 950 | 942 | 1 070 | 1 830 | 1 630 | 875 | 842 | 863 | 888 | 3 |
| 4 | 903 | 934 | 980 | 951 | 940 | 1 080 | 1 880 | 1 570 | 888 | 850 | 837 | 881 | 4 |
| 5 | 928 | 980 | 978 | 945 | 939 | 1 080 | 1 780 | 1 840 | 839 | 880 | 833 | 886 | 5 |
| 6 | 928 | 948 | 973 | 984 | 942 | 1 070 | 1 740 | 1 480 | 832 | 848 | 843 | 810 | 6 |
| 7 | 881 | 888 | 974 | 981 | 942 | 1 070 | 1 790 | 1 400 | 788 | 717 | 821 | 837 | 7 |
| 8 | 908 | 888 | 978 | 983 | 938 | 1 080 | 1 820 | 1 380 | 804 | 881 | 882 | 873 | 8 |
| 9 | 914 | 953 | 988 | 981 | 943 | 1 070 | 1 820 | 1 280 | 804 | 889 | 817 | 881 | 9 |
| 10 | 930 | 880 | 978 | 944 | 888 | 1 080 | 1 870 | 1 180 | 788 | 831 | 888 | 889 | 10 |
| 11 | 948 | 889 | 888 | 949 | 978 | 1 080 | 1 900 | 1 030 | 770 | 835 | 832 | 828 | 11 |
| 12 | 938 | 874 | 880 | 948 | 1 000 | 1 180 | 1 920 | 974 | 748 | 811 | 884 | 889 | 12 |
| 13 | 942 | 878 | 883 | 948 | 1 010 | 1 230 | 1 920 | 842 | 785 | 844 | 888 | 881 | 13 |
| 14 | 948 | 874 | 948 | 934 | 988 | 1 340 | 1 840 | 932 | 782 | 818 | 893 | 728 | 14 |
| 15 | 948 | 858 | 948 | 934 | 983 | 1 380 | 1 850 | 935 | 783 | 782 | 870 | 894 | 15 |
| 16 | 951 | 888 | 947 | 938 | 978 | 1 380 | 1 850 | 830 | 718 | 888 | 878 | 723 | 16 |
| 17 | 947 | 883 | 941 | 948 | 947 | 1 340 | 1 840 | 823 | 718 | 881 | 812 | 708 | 17 |
| 18 | 948 | 878 | 944 | 882 | 941 | 1 270 | 1 830 | 872 | 780 | 810 | 843 | 748 | 18 |
| 19 | 948 | 877 | 950 | 918 | 942 | 1 220 | 1 830 | 788 | 894 | 802 | 818 | 730 | 19 |
| 20 | 948 | 888 | 958 | 917 | 937 | 1 240 | 1 830 | 809 | 734 | 813 | 882 | 787 | 20 |
| 21 | 947 | 888 | 944 | 948 | 938 | 1 230 | 1 840 | 883 | 708 | 888 | 838 | 784 | 21 |
| 22 | 948 | 878 | 947 | 887 | 937 | 1 230 | 1 840 | 882 | 835 | 880 | 887 | 784 | 22 |
| 23 | 880 | 1 000 | 881 | 810 | 938 | 1 240 | 1 850 | 884 | 880 | 884 | 888 | 788 | 23 |
| 24 | 858 | 887 | 948 | 818 | 942 | 1 270 | 1 840 | 887 | 704 | 888 | 883 | 787 | 24 |
| 25 | 888 | 883 | 881 | 840 | 882 | 1 300 | 1 840 | 888 | 843 | 881 | 858 | 737 | 25 |
| 26 | 888 | 882 | 901 | 944 | 884 | 1 340 | 1 810 | 877 | 887 | 880 | 838 | 734 | 26 |
| 27 | 933 | 884 | 914 | 888 | 1 020 | 1 380 | 1 810 | 824 | 888 | 874 | 820 | 780 | 27 |
| 28 | 928 | 878 | 941 | 944 | 1 080 | 1 380 | 1 800 | 888 | 880 | 887 | 821 | 803 | 28 |
| 29 | 934 | | 948 | 944 | 1 070 | 1 430 | 1 880 | 828 | 848 | 882 | 884 | 812 | 29 |
| 30 | 931 | | 948 | 944 | 1 080 | 1 470 | 1 840 | 817 | 878 | 880 | 872 | 733 | 30 |
| 31 | 938 | | 888 | | 1 100 | | 1 810 | 838 | | 887 | | 823 | 31 |
| TOTAL | 28 888 | 27 140 | 28 807 | 28 227 | 30 280 | 38 880 | 87 800 | 33 188 | 22 288 | 19 344 | 18 478 | 22 084 | TOTAL |
| MEAN | 934 | 888 | 888 | 941 | 978 | 1 230 | 1 880 | 1 070 | 742 | 824 | 848 | 711 | MEAN |
| MAX | 988 | 1 000 | 982 | 882 | 1 100 | 1 470 | 1 880 | 1 730 | 878 | 717 | 883 | 823 | MAX |
| MIN | 882 | 841 | 881 | 887 | 937 | 1 080 | 1 840 | 788 | 838 | 882 | 812 | 888 | MIN |

### SUMMARY FOR THE YEAR 1989

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 883
MAXIMUM DAILY, 1 880 ON JUL 18
MINIMUM DAILY, 812 ON NOV 17

TYPE OF GAUGE - POWER PLANT
LOCATION - LAT 50 13 30 N
LONG 96 34 18 W
DRAINAGE AREA, 125 000 km²

REGULATED SINCE 1907

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | 2 800 000 | JUL | 4 870 000 |
| FEB | 2 340 000 | AUG | 2 870 000 |
| MAR | 2 880 000 | SEP | 1 830 000 |
| APR | 2 440 000 | OCT | 1 870 000 |
| MAY | 2 810 000 | NOV | 1 430 000 |
| JUN | 3 180 000 | DEC | 1 910 000 |

TOTAL DISCHARGE, 30 400 000 dam³

DATA CONTRIBUTED BY -
CITY OF WINNIPEG HYDRO-ELECTRIC SYSTEM

## WINNIPEG RIVER HEAD WATER SEVEN SISTERS POWER PLANT - STATION NO. 05PP067

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 274.125 | 274.087 | 274.116 | 274.119 | 274.076 | 274.107 | 274.113 | 274.131 | 274.048 | 274.085 | 274.107 | 274.110 | 1 |
| 2 | 274.087 | 274.084 | 274.122 | 274.084 | 274.048 | 274.110 | 274.148 | 274.113 | 274.085 | 274.079 | 274.039 | 274.131 | 2 |
| 3 | 274.087 | 274.087 | 274.103 | 274.079 | 274.079 | 274.091 | 274.181 | 274.118 | 274.137 | 274.113 | 274.122 | 274.164 | 3 |
| 4 | 274.107 | 274.125 | 274.094 | 274.085 | 274.094 | 274.081 | 274.182 | 274.081 | 274.118 | 274.084 | 274.087 | 274.184 | 4 |
| 5 | 274.122 | 274.103 | 274.085 | 274.122 | 274.076 | 274.076 | 274.140 | 274.038 | 274.070 | 274.084 | 274.118 | 274.182 | 5 |
| 6 | 274.125 | 274.118 | 274.100 | 274.128 | 274.110 | 274.131 | 274.024 | 273.985 | 274.084 | 274.122 | 274.185 | 274.182 | 6 |
| 7 | 274.091 | 274.125 | 274.079 | 274.125 | 274.122 | 274.188 | 274.094 | 274.030 | 274.018 | 274.100 | 274.181 | 274.148 | 7 |
| 8 | 274.118 | 274.137 | 274.082 | 274.113 | 274.118 | 274.128 | 274.125 | 274.030 | 274.024 | 274.113 | 274.107 | 274.134 | 8 |
| 9 | 274.107 | 274.118 | 274.073 | 274.091 | 274.125 | 274.137 | 274.081 | 274.128 | 274.110 | 274.085 | 274.078 | 274.122 | 9 |
| 10 | 274.131 | 274.126 | 274.113 | 274.118 | 274.087 | 274.148 | 274.107 | 274.110 | 274.078 | 274.087 | 274.107 | 274.118 | 10 |
| 11 | 274.091 | 274.125 | 274.076 | 274.118 | 274.039 | 274.137 | 274.158 | 274.122 | 274.082 | 274.087 | 274.188 | 274.143 | 11 |
| 12 | 274.091 | 274.118 | 274.100 | 274.122 | 274.094 | 274.177 | 274.140 | 274.081 | 274.143 | 274.107 | 274.152 | 274.191 | 12 |
| 13 | 274.137 | 274.118 | 274.107 | 274.137 | 274.122 | 274.201 | 274.103 | 274.046 | 274.110 | 274.085 | 274.137 | 274.188 | 13 |
| 14 | 274.097 | 274.094 | 274.085 | 274.100 | 274.152 | 274.183 | 274.084 | 274.078 | 274.081 | 274.134 | 274.110 | 274.082 | 14 |
| 15 | 274.122 | 274.094 | 274.073 | 274.107 | 274.158 | 274.152 | 274.107 | 274.094 | 274.082 | 274.122 | 274.094 | 274.113 | 15 |
| 16 | 274.118 | 274.103 | 274.103 | 274.100 | 274.131 | 274.113 | 274.152 | 274.131 | 274.085 | 274.113 | 274.103 | 274.085 | 16 |
| 17 | 274.116 | 274.116 | 274.110 | 274.081 | 274.070 | 274.085 | 274.181 | 274.100 | 274.091 | 274.128 | 274.094 | 274.131 | 17 |
| 18 | 274.113 | 274.116 | 274.122 | 274.125 | 274.084 | 274.043 | 274.100 | 274.073 | 274.078 | 274.082 | 274.107 | 274.110 | 18 |
| 19 | 274.134 | 274.084 | 274.107 | 274.091 | 274.085 | 274.087 | 274.113 | 274.062 | 274.118 | 274.118 | 274.082 | 274.152 | 19 |
| 20 | 274.107 | 274.137 | 274.128 | 274.091 | 274.082 | 274.103 | 274.134 | 274.024 | 274.143 | 274.148 | 274.100 | 274.118 | 20 |
| 21 | 274.110 | 274.116 | 274.113 | 274.078 | 274.103 | 274.048 | 274.100 | 274.126 | 274.103 | 274.113 | 274.128 | 274.137 | 21 |
| 22 | 274.087 | 274.087 | 274.110 | 274.148 | 274.103 | 274.078 | 274.113 | 274.021 | 274.058 | 274.122 | 274.143 | 274.128 | 22 |
| 23 | 274.084 | 274.103 | 274.107 | 274.122 | 274.110 | 274.100 | 274.116 | 274.038 | 274.134 | 274.131 | 274.116 | 274.100 | 23 |
| 24 | 274.110 | 274.122 | 274.100 | 274.128 | 274.128 | 274.131 | 274.058 | 274.073 | 274.128 | 274.100 | 274.128 | 274.118 | 24 |
| 25 | 274.087 | 274.078 | 274.085 | 274.137 | 274.118 | 274.143 | 274.070 | 274.107 | 274.118 | 274.128 | 274.073 | 274.078 | 25 |
| 26 | 274.116 | 274.073 | 274.087 | 274.100 | 274.113 | 274.048 | 274.100 | 274.122 | 274.128 | 274.128 | 274.113 | 274.131 | 26 |
| 27 | 274.087 | 274.088 | 274.087 | 274.127 | 274.134 | 274.058 | 274.107 | 274.113 | 274.118 | 274.182 | 274.143 | 274.140 | 27 |
| 28 | 274.107 | 274.113 | 274.116 | 274.137 | 274.177 | 274.181 | 274.100 | 274.078 | 274.100 | 274.103 | 274.182 | 274.137 | 28 |
| 29 | 274.110 | | 274.100 | 274.184 | 274.158 | 274.126 | 274.085 | 274.081 | 274.084 | 274.122 | 274.140 | 274.088 | 29 |
| 30 | 274.107 | | 274.131 | 274.084 | 274.123 | 274.091 | 274.081 | 274.070 | 274.110 | 274.103 | 274.128 | 274.084 | 30 |
| 31 | 274.122 | | 274.087 | | 274.084 | | 274.100 | 274.030 | | 274.110 | | 274.110 | 31 |
| MEAN | 274.110 | 274.108 | 274.101 | 274.111 | 274.106 | 274.115 | 274.108 | 274.078 | 274.084 | 274.108 | 274.117 | 274.128 | MEAN |
| MAX | 274.137 | 274.137 | 274.131 | 274.184 | 274.177 | 274.201 | 274.181 | 274.131 | 274.143 | 274.182 | 274.188 | 274.184 | MAX |
| MIN | 274.087 | 274.084 | 274.073 | 274.084 | 274.039 | 274.043 | 274.024 | 273.985 | 274.018 | 274.085 | 274.039 | 274.078 | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MEAN, 274.107
MAXIMUM DAILY, 274.201 ON JUN 13
MINIMUM DAILY, 273.985 ON AUG 5

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 07 10 N
LONG 96 00 50 W
DATA CONTRIBUTED BY -
MANITOBA HYDRO

REGULATED

DRAINAGE AREA,
127 000 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1928 ADJ.)

## WINNIPEG RIVER TAILRACE, GREAT FALLS POWER PLANT - STATION NO. 05PP048

### DAILY WATER LEVEL IN METRES FOR 1989

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 230.488 | 230.663 | 230.708 | 230.563 | 230.932 | 231.002 | 231.410 | 231.887 | 230.332 | 230.888 | 230.917 | 230.748 | 1 |
| 2 | 230.588 | 230.667 | 230.694 | 230.602 | 230.852 | 230.980 | 231.374 | 231.880 | 230.184 | 230.932 | 230.822 | 230.694 | 2 |
| 3 | 230.584 | 230.648 | 230.638 | 230.630 | 230.688 | 230.818 | 231.374 | 231.494 | 230.148 | 230.861 | 230.783 | 230.703 | 3 |
| 4 | 230.680 | 230.651 | 230.630 | 230.680 | 230.616 | 230.826 | 231.438 | 231.488 | 230.322 | 230.968 | 230.861 | 230.778 | 4 |
| 5 | 230.488 | 230.587 | 230.633 | 230.648 | 230.636 | 230.843 | 231.582 | 231.483 | 230.148 | 230.908 | 230.441 | 230.184 | 5 |
| 6 | 230.588 | 230.538 | 230.638 | 230.627 | 230.688 | 230.888 | 231.808 | 231.386 | 230.084 | 229.967 | 229.676 | 229.861 | 6 |
| 7 | 230.703 | 230.488 | 230.627 | 230.542 | 230.779 | 230.928 | 231.837 | 231.178 | 230.060 | 229.687 | 229.630 | 229.893 | 7 |
| 8 | 230.861 | 230.606 | 230.624 | 230.624 | 230.724 | 230.918 | 231.948 | 231.142 | 230.060 | 229.777 | 229.650 | 229.820 | 8 |
| 9 | 230.691 | 230.548 | 230.602 | 230.618 | 230.687 | 230.916 | 231.716 | 230.871 | 230.248 | 230.006 | 229.958 | 230.083 | 9 |
| 10 | 230.588 | 230.584 | 230.618 | 230.613 | 230.884 | 230.916 | 231.770 | 230.648 | 230.301 | 230.008 | 230.047 | 229.886 | 10 |
| 11 | 230.575 | 230.588 | 230.587 | 230.618 | 230.828 | 230.910 | 231.781 | 230.781 | 230.188 | 229.810 | 229.814 | 230.020 | 11 |
| 12 | 230.568 | 230.575 | 230.648 | 230.618 | 230.802 | 231.038 | 231.884 | 230.748 | 230.026 | 229.810 | 229.360 | 229.980 | 12 |
| 13 | 230.684 | 230.572 | 230.684 | 230.602 | 230.788 | 231.111 | 232.063 | 230.688 | 230.051 | 229.770 | 229.920 | 229.874 | 13 |
| 14 | 230.642 | 230.606 | 230.618 | 230.602 | 230.737 | 231.111 | 231.784 | 230.488 | 230.051 | 229.861 | 229.770 | 229.838 | 14 |
| 15 | 230.587 | 230.587 | 230.602 | 230.602 | 230.721 | 231.187 | 231.742 | 230.337 | 230.068 | 229.818 | 229.893 | 229.688 | 15 |
| 16 | 230.838 | 230.621 | 230.608 | 230.630 | 230.880 | 231.340 | 231.931 | 230.388 | 230.123 | 230.318 | 229.938 | 230.121 | 16 |
| 17 | 230.721 | 230.634 | 230.647 | 230.587 | 230.801 | 231.388 | 231.863 | 230.386 | 229.988 | 230.072 | 229.738 | 229.923 | 17 |
| 18 | 230.721 | 230.605 | 230.643 | 230.618 | 230.783 | 231.236 | 231.892 | 230.380 | 230.103 | 229.973 | 229.838 | 230.036 | 18 |
| 19 | 230.660 | 230.663 | 230.591 | 230.621 | 230.645 | 231.133 | 231.892 | 230.081 | 230.103 | 229.867 | 229.680 | 230.183 | 19 |
| 20 | 230.673 | 230.630 | 230.564 | 230.578 | 230.878 | 230.988 | 231.884 | 230.100 | 229.883 | 229.807 | 229.578 | 230.138 | 20 |
| 21 | 230.638 | 230.630 | 230.683 | 230.638 | 230.891 | 231.011 | 231.881 | 230.331 | 229.978 | 229.627 | 229.681 | 230.188 | 21 |
| 22 | 230.618 | 230.618 | 230.680 | 230.581 | 230.881 | 231.078 | 231.837 | 230.383 | 230.081 | 229.664 | 229.681 | 230.218 | 22 |
| 23 | 230.888 | 230.648 | 230.498 | 230.588 | 230.881 | 231.038 | 231.800 | 230.328 | 229.703 | 229.748 | 229.618 | 230.118 | 23 |
| 24 | 230.803 | 230.663 | 230.471 | 230.488 | 230.584 | 230.958 | 231.800 | 230.348 | 229.821 | 229.668 | 229.668 | 230.080 | 24 |
| 25 | 230.683 | 230.687 | 230.444 | 230.388 | 230.770 | 231.102 | 231.800 | 230.346 | 230.080 | 229.938 | 229.784 | 230.197 | 25 |
| 26 | 230.854 | 230.708 | 230.388 | 230.498 | 230.938 | 231.218 | 231.800 | 230.377 | 229.935 | 229.932 | 229.388 | 229.885 | 26 |
| 27 | 230.587 | 230.727 | 230.438 | 230.618 | 230.882 | 231.243 | 231.778 | 230.334 | 229.841 | 229.807 | 229.762 | 229.988 | 27 |
| 28 | 230.683 | 230.681 | 230.481 | 230.743 | 230.888 | 231.142 | 231.738 | 230.327 | 229.874 | 229.633 | 229.871 | 230.318 | 28 |
| 29 | 230.642 | | 230.429 | 230.829 | 230.885 | 231.108 | 231.748 | 230.084 | 229.788 | 229.734 | 229.788 | 230.322 | 29 |
| 30 | 230.642 | | 230.808 | 230.832 | 230.880 | 231.337 | 231.748 | 230.221 | 229.432 | 229.888 | 229.848 | 230.234 | 30 |
| 31 | 230.632 | | 230.887 | | 231.028 | | 231.738 | 230.366 | | 230.008 | | 230.080 | 31 |
| MEAN | 230.618 | 230.617 | 230.573 | 230.618 | 230.768 | 231.080 | 231.781 | 230.087 | 230.031 | 229.882 | 229.723 | 230.037 | MEAN |
| MAX | 230.721 | 230.727 | 230.708 | 230.832 | 231.028 | 231.385 | 232.063 | 231.887 | 230.332 | 230.318 | 229.893 | 230.332 | MAX |
| MIN | 230.488 | 230.488 | 230.388 | 230.388 | 230.581 | 230.843 | 231.374 | 230.084 | 229.432 | 229.627 | 229.361 | 229.703 | MIN |

### SUMMARY FOR THE YEAR 1989

WATER LEVELS IN METRES

MEAN, 230.826
MAXIMUM DAILY, 232.063 ON JUL 13
MINIMUM DAILY, 229.361 ON NOV 4

TYPE OF GAUGE - RECORDING
LOCATION - LAT 50 37 50 N
LONG 96 00 15 W
DATA CONTRIBUTED BY -
MANITOBA HYDRO

REGULATED

DRAINAGE AREA,
134 000 km²

WATER LEVELS ARE REFERRED TO GEODETIC SURVEY OF CANADA DATUM (LOCAL 1928 ADJ.)

## WOODY RIVER NEAR BOWSMAN - STATION NO. 05LE004

### DAILY DISCHARGE IN CUBIC METRES PER SECOND FOR 1988

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | --- | 0B | 0 B | 5.05 | 4.15 | 2.70 | 0.098 | 3.37 | 1.71 | --- | --- | 1 |
| 2 | --- | --- | 0B | 0 B | 5.70 | 3.90 | 2.61 | 0.076 | 2.73 | 1.66 | --- | --- | 2 |
| 3 | --- | --- | 0B | 0 B | 5.35 | 3.66 | 2.95 | 0.088 | 2.25 | 1.55 | --- | --- | 3 |
| 4 | --- | --- | 0B | 0 B | 5.02 | 3.29 | 2.94 | 0.077 | 2.40 | 1.39 | --- | --- | 4 |
| 5 | --- | --- | 0B | 0.0218 | 4.58 | 3.04 | 2.80 | 0.131 | 2.07 | 1.35 | --- | --- | 5 |
| 6 | --- | --- | 0B | 0.1058 | 4.13 | 2.88 | 2.78 | 0.111 | 3.21 | 1.36 | --- | --- | 6 |
| 7 | --- | --- | 0B | 0.2008 | 3.81 | 2.73 | 2.63 | 0.083 | 3.68 | 1.23 | --- | --- | 7 |
| 8 | --- | --- | 0B | 0.2858 | 3.50 | 2.54 | 2.39 | 0.080 | 3.88 | 1.18 | --- | --- | 8 |
| 9 | --- | --- | 0B | 0.4678 | 3.18 | 2.34 | 2.27 | 0.044 | 3.88 | 1.08 | --- | --- | 9 |
| 10 | --- | --- | 0B | 0.8488 | 2.98 | 2.19 | 2.04 | 0.018 | 4.28 | 0.991 | --- | --- | 10 |
| 11 | --- | --- | 0B | 1.50 B | 2.84 | 2.35 | 1.88 | 0.002 | 4.27 | 1.03 | --- | --- | 11 |
| 12 | --- | --- | 0B | 2.07 B | 2.89 | 2.83 | 1.78 | 0 | 4.41 | 1.03 | --- | --- | 12 |
| 13 | --- | --- | 0B | 2.51 B | 2.93 | 2.48 | 1.65 | 0 | 4.34 | 1.00 | --- | --- | 13 |
| 14 | --- | --- | 0B | 2.89 B | 2.34 | 2.46 | 1.39 | 0 | 4.31 | 1.06 | --- | --- | 14 |
| 15 | --- | --- | 0B | 2.97 B | 2.20 | 2.38 | 1.30 | 0 | 4.26 | 1.30 | --- | --- | 15 |
| 16 | --- | --- | 0B | 3.04 B | 2.03 | 2.22 | 1.12 | 0.024 | 4.50 | 1.34 | --- | --- | 16 |
| 17 | --- | --- | 0B | 3.27 B | 1.93 | 2.13 | 1.03 | 0.037 | 4.38 | 1.33 | --- | --- | 17 |
| 18 | --- | --- | 0B | 3.67 B | 1.86 | 1.94 | 0.878 | 0.113 | 4.20 | 1.33 | --- | --- | 18 |
| 19 | --- | --- | 0B | 4.08 B | 1.87 | 1.86 | 0.724 | 0.281 | 4.02 | 1.23 | --- | --- | 19 |
| 20 | --- | --- | 0B | 5.20 B | 2.06 | 1.88 | 0.575 | 0.415 | 3.84 | 1.20 | --- | --- | 20 |
| 21 | --- | --- | 0B | 5.90 B | 1.98 | 1.84 | 0.484 | 0.273 | 3.71 | 1.17 | --- | --- | 21 |
| 22 | --- | --- | 0B | 6.60 B | 2.07 | 1.44 | 0.453 | 0.184 | 3.34 | 1.23 | --- | --- | 22 |
| 23 | --- | --- | 0B | 6.46 B | 2.08 | 1.11 | 0.371 | 0.158 | 3.15 | 1.20 | --- | --- | 23 |
| 24 | --- | --- | 0B | 7.61 B | 2.34 | 1.11 | 0.325 | 0.115 | 2.83 | 1.22 | --- | --- | 24 |
| 25 | --- | --- | 0B | 8.02 | 3.34 | 0.832 | 0.292 | 0.147 | 2.78 | 1.25 | --- | --- | 25 |
| 26 | --- | --- | 0B | 8.50 | 4.63 | 1.14 | 0.253 | 0.193 | 2.82 | 1.28 | --- | --- | 26 |
| 27 | --- | --- | 0B | 8.43 | 5.11 | 1.36 | 0.238 | 0.178 | 2.34 | 1.42 | --- | --- | 27 |
| 28 | --- | --- | 0B | 8.71 | 4.86 | 2.29 | 0.183 | 0.268 | 2.21 | 1.86 | --- | --- | 28 |
| 29 | --- | | 0B | 8.58 | 4.68 | 2.72 | 0.165 | 1.10 | 2.00 | 2.00 | --- | --- | 29 |
| 30 | --- | | 0B | 8.10 | 4.60 | 2.63 | 0.126 | 2.70 | 1.78 | 2.45 | --- | --- | 30 |
| 31 | --- | | 0B | | 4.33 | | 0.116 | 3.00 | | 2.69 A | | --- | 31 |
| TOTAL | --- | --- | 0 | 102.048 | 106.74 | 68.312 | 41.721 | 10.117 | 101.77 | 42.931 | --- | --- | TOTAL |
| MEAN | --- | --- | 0 | 3.40 | 3.44 | 2.31 | 1.35 | 0.338 | 3.39 | 1.36 | --- | --- | MEAN |
| MAX | --- | --- | 0 | 8.60 | 8.05 | 4.15 | 2.95 | 3.00 | 4.60 | 2.69 | --- | --- | MAX |
| MIN | --- | --- | 0 | 0 | 1.88 | 0.832 | 0.116 | 0 | 1.78 | 0.991 | --- | --- | MIN |

### SUMMARY FOR THE MONTHS MAR TO OCT

DISCHARGES IN CUBIC METRES PER SECOND

MEAN, 1.84
MAXIMUM DAILY, 8.60B ON APR 22
MINIMUM DAILY, 0B ON MAR 1

TYPE OF GAUGE - RECORDING
LOCATION - LAT 52 15 30 N
LONG 101 08 15 W
DRAINAGE AREA, 2 110 km²
A - MANUAL GAUGE
B - ICE CONDITIONS

NATURAL FLOW

MONTHLY TOTAL DISCHARGE IN CUBIC DECAMETRES

| | | | |
|---|---|---|---|
| JAN | --- | JUL | 3 600 |
| FEB | --- | AUG | 874 |
| MAR | 0 | SEP | 8 780 |
| APR | 8 820 | OCT | 3 710 |
| MAY | 9 220 | NOV | --- |
| JUN | 5 900 | DEC | --- |

TOTAL DISCHARGE, 41 000 dam³

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